DOCUMENT RESUME

ED 215 322 CS 006 620

TITLE The Improvement of Reading in the Secondary School.
INSTITUTION Texas Education Agency, Austin. Div. of Curriculum Development.
PUB DATE [80]
NOTE 68p.
AVAILABLE FROM Publications Distribution Office, Texas Education Agency, Division of Curriculum Development, 201 East 11th St., Austin, TX 78701 ($2.00).

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Academically Gifted; Basic Skills; *Course Content; *Curriculum Development; Reading Diagnosis; *Reading Instruction; Reading Material Selection; *Reading Programs; Secondary Education

ABSTRACT

Intended for reading curriculum designers and teachers, this manual presents suggestions for developing a balanced reading program at the junior and senior high school levels. The first section discusses the organization and administration of a secondary school reading program, including the essentials of a balanced program and the evaluation of reading development. The second section, on developmental reading, includes a discussion of reading readiness and a course description. The third section presents guidelines for adjusting instruction for academic differences, such as basic skills programs and reading for gifted and creative students. The subjects discussed in the content area reading section include social studies, mathematics, second languages, and business education. The appendixes contain the objective specifications of the Texas Assessment of Basic Skills in Reading, book selection aids, sources of diagnostic materials and addresses of professional organizations and publications, as well as a bibliography. (HTH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED215322

The Improvement of Reading In the Secondary School

After the original free distribution to authorized institutions, additional copies may be purchased for $2.00 by contacting the Publications Distribution Office, Texas Education Agency; however, with the increasing demand for educational material, the supply at times may be exhausted.

Since this Texas Education Agency publication is not copyrighted, any or all sections may be duplicated.

Texas Education Agency
Division of Curriculum Development
201 East 11th Street
Austin, Texas 78701

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Linda Kemp

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CS006620

STATE BOARD OF EDUCATION
(State Board for Vocational Education)

JOE KELLY BUTLER, Houston
Chairman of the State Board of Education
Congressional District 7

W.H. FETTER, La Marque
Vice Chairman of the State Board of Education
Congressional District 9

FAUL MATHEWS, Greenville
Secretary of the State Board of Education
Congressional District 4

Board Members

MRS. ELIZABETH R. ARMSTRONG, Lake Jackson
Congressional District 22

VOLLY BASTINE, JR., Houston
Congressional District 18

JAMES M. BINION, Abilene
Congressional District 17

W.W. CARTER, Amarillo
Congressional District 13

DON H. COOK, D.D.S., Mesquite
Congressional District 5

BRYAN CROUCH, Poteet
Congressional District 23

DR. VIRGINIA CURREY, Arlington
Congressional District 24

JIMMY L. ELROD, San Antonio
Congressional District 21

MIKE FERNANDEZ, JR., San Antonio
Congressional District 20

WAYNE FREDERICK, Orange
Congressional District 2

E.R. GREGG, JR., Jacksonville
Congressional District 1

RUBEN E. HINOJOSA, Mercedes
Congressional District 15

JIM HOLLINGSWORTH, De Soto
Congressional District 6

WILLIAM N. KEMP, O.D., Houston
Congressional District 8

MRS. MARY ANN LEVERIDGE, East Bernard
Congressional District 14

REX REDDELL, San Marcos
Congressional District 10

PAUL M. STEVENS, Fort Worth
Congressional District 12

MRS. LAURA TYNES, Waco
Congressional District 11

MRS. MARJORY VICKERY, Lewisville
Congressional District 3

JAMES H. WHITESIDE, Lubbock
Congressional District 19

WAYNE WINDLE, El Paso
Congressional District 16

RAYMON L. BYNUM, Commissioner of Education
(Executive Officer of the State Board of Education)

Committees of the State Board of Education

Policy, Budget, and Finance
E.R. GREGG, Chairman
ELIZABETH ARMSTRONG, Co-Chairman

Special Populations
RUBEN E. HINOJOSA, Chairman
DON H. COOK, Co-Chairman

Teacher Preparation, School Support Services, and Special Projects
BRYAN CROUCH, Chairman
JAMES H. WHITESIDE, Co-Chairman

Instruction, Research, and Evaluation
MARY ANN LEVERIDGE, Chairman
WILLIAM N. KEMP, Co-Chairman

Litigation and Appeals
WAYNE WINDLE, Chairman
VOLLY BASTINE, Co-Chairman

Investment of the Permanent School Fund
JIMMY L. ELROD, Chairman
PAUL M. STEVENS, Co-Chairman

Ad Hoc Committees

Vocational Task Force
WAYNE FREDERICK, Chairman
REX REDDELL, Co-Chairman

Planning Committee
JIMMY L. ELROD, Chairman
W.W. CARTER, Co-Chairman

Steering Committees
(Legislative Mandates)

Finance
E.R. GREGG, Chairman
W.H. FETTER
JAMES H. WHITESIDE

Teacher Preparation
BRYAN CROUCH, Chairman
MIKE FERNANDEZ
REX REDDELL

Curriculum
MARY ANN LEVERIDGE, Chairman
JIMMY L. ELROD
WILLIAM N. KEMP

Vocational Education
REX REDDELL, Chairman
BRYAN CROUCH
WAYNE FREDERICK
JIM HOLLINGSWORTH

Senate Concurrent Resolution 22
(67th Legislature, 1st Called Session)

JOE KELLY BUTLER
JIMMY L. ELROD
E.R. GREGG

TEXAS EDUCATION AGENCY

This publication was developed by TEA staff members in the office of the Deputy Commissioner for Planning, Research, and Curriculum.

THOMAS E. ANDERSON, Deputy Commissioner
for Planning, Research, and Curriculum

VICTORIA BERGIN, Associate Commissioner
for General Education

LEROY F. PSENCIK, Director
Division of Curriculum Development

Reading Specialists
DELORES BARKER
CELESTIA DAVIS

PAT FOLMAR ROBINSON, Educational Writer
Division of Curriculum Development

Foreword

This guide for use by administrative and supervisory personnel in Texas schools offers suggestions for developing and upgrading middle school, junior high, and high school reading programs. Recognized authorities in reading have worked with the staff of the Texas Education Agency to identify the elements of good secondary reading programs.

We hope this guide will provide assistance in giving secondary school students the instruction in reading they will need for further education or for career advancement.

Raymon L. Bynum
Commissioner of Education

Acknowledgments

The following persons provided technical assistance:

Mario C. Di Nello
Director of the Center for the Study of Learning
Texas Woman's University

William Harmer
Director of the Learning Abilities Center
University of Texas at Austin

Mary Wakefield
Director of Clinical Services
Sam Houston State University

Contents

ORGANIZATION AND ADMINISTRATION OF A SECONDARY READING PROGRAM ... 1

Types of Reading Programs ... 3
Organization of a Secondary Reading Program ... 4
Essentials of a Balanced Reading Program ... 4
Evaluation of Reading Development ... 5

DEVELOPMENTAL READING ... 7

Readiness ... 9
Nature of the Program ... 10
Course Description ... 21

ADJUSTING INSTRUCTION FOR ACADEMIC DIFFERENCES ... 25

The Reading Improvement Program ... 27
The Basic Reading Skills Program ... 30
Reading for the Gifted and Creative Student ... 34

READING IN THE CONTENT AREAS ... 39

Reading in English ... 42
Reading in Social Studies ... 47
Reading in Mathematics ... 47
Reading in Science ... 48
Reading in Second Languages ... 49
Reading in Business Education ... 49
Reading in Driver Education ... 50
Reading and Physical Education ... 51
Reading and the Fine Arts ... 52
Reading and the Learning Resource Center ... 53
Reading in Other Content Areas ... 53

APPENDIXES ... 55

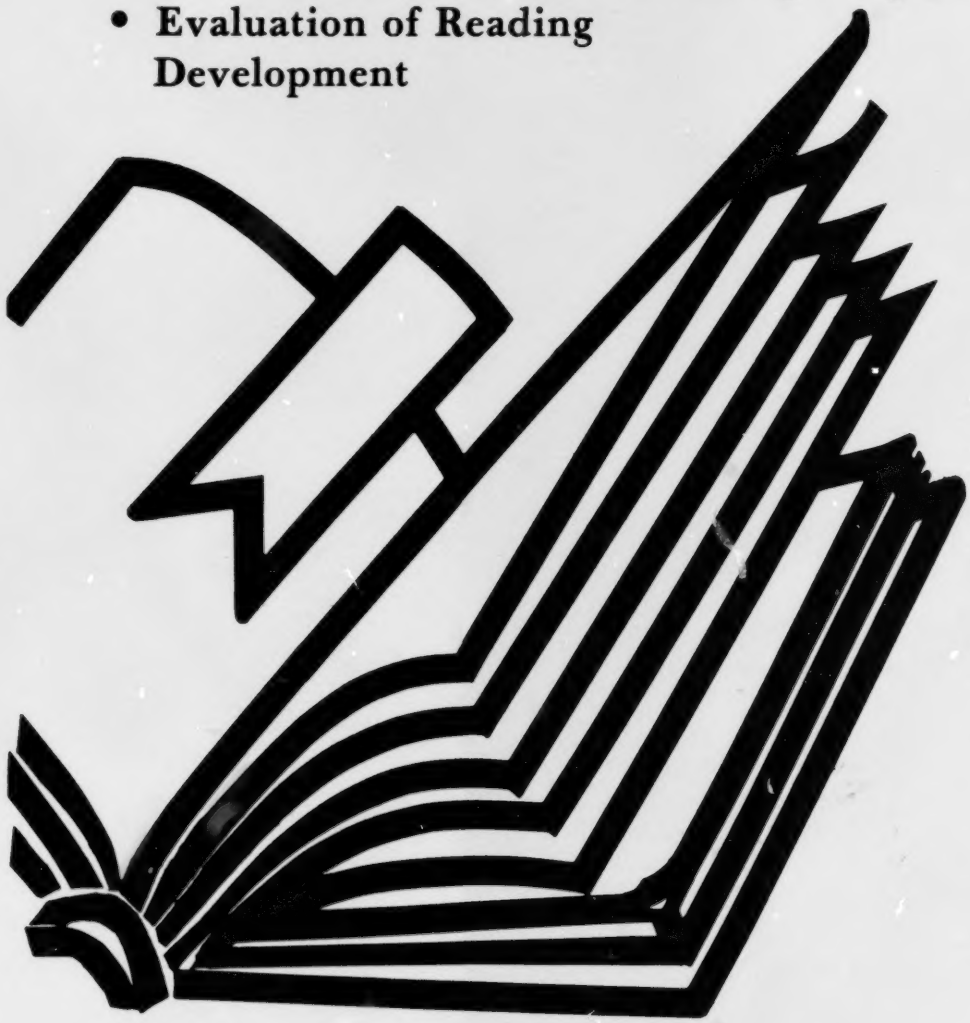
Appendix A ... 57
Texas Assessment of Basic Skills, Reading ... 57
Appendix B ... 61
Bibliography ... 61
Book Selection Aids ... 63
Sources of Diagnostic Materials ... 67
Addresses of Professional Organizations and Publications ... 68

"Open your eyes, let your minds reach forth, and grasp at these and every other clump of printed matter you can find. They will excite you, teach you, entertain you.
Reading is Freedom."

Alan Dean Foster

Organization and Administration Of a Secondary Reading Program

- **Types of Reading Programs**
- **Organization of a Secondary Reading Program**
- **Essentials of a Balanced Reading Program**
- **Evaluation of Reading Development**



Organization and Administration Of a Secondary Reading Program

There is increasing emphasis on the reading program at all levels of education. With the realization of the importance of reading to scholastic achievement and to success in most chosen careers, the number of middle school, junior and senior high schools offering reading instruction to help their students learn skills of an advanced nature continues to grow. Studies indicate that persons now entering the economic world may change their occupations at least three times during their lifetimes. To help students facing this kind of future, we must design programs that will prepare them for self-directed learning.

Although there is no single best method to follow in every school, the reading program that is to provide the framework for instruction according to individual differences must be broad in scope but specifically focused.

Types of Reading Programs

The types of reading programs may consist of

- reading offered as a separate course
- reading skills taught as part of the English Language Arts curriculum
- reading skills taught as part of skill development in the content areas
- reading skills taught in a reading laboratory

Types of programs for teaching reading as a part of the English Language Arts curriculum include

- differentiated assignments based on the same textbook
- independent groups of students assigned the same topic in different texts
- thematic units of study with different texts for each of several groups
- self-selected materials for independent individual study

The reading consultant or teacher may serve as the coordinator of a reading program planned by members of a faculty committee and designed for reading skill development in the content areas. Every teacher would assume the responsibility of teaching the reading skills essential to success in the subject matter areas. The effectiveness of such a plan would depend upon the organization of the reading committee and its insight into the total reading program.

While the usual approach to the teaching of reading would include scheduled classes in reading instruction, many school districts provide reading laboratory experiences for students who are average and superior readers as well as for students who are reading below the expected level of achievement. The scheduling may be the same as for regular class periods or modular scheduling: for example, students

may be programmed as in a daily class for one or more semesters, one or two days each week, or every day until the objective for which the program was initiated is reached. In some schools students choose to study in the reading laboratory instead of a study hall.

Organization of a Secondary Reading Program

The school administrator is the key to the organization of a secondary reading program. His or her enthusiastic support will result in

- interest of the professional personnel
- support of parents and students
- adequate financial support
- scheduled time for study and surveys
- scheduled time for inservice programs
- proper representation to the school board

Many schools have started successful reading programs with the appointment of committees composed of faculty members and other professional personnel. Such a committee should be charged with the responsibility of outlining administrative criteria for a program that would be appropriate for the local school's needs. Some of the functions of a committee would include

- defining the nature and scope of the program
- promoting the all-school concept
- aiding the reading specialist in the development and selection of materials
- promoting inservice programs for teaching reading in the content areas
- developing a system of continuous evaluation

An appropriate first step for the reading committee to take might be a survey of the present instructional program as to the status of the students' reading abilities, the competencies of the faculty to teach reading skills, materials available for the instructional program, and present efforts to teach the skills. The committee could then make recommendations on what direction the program should take.

Essentials of a Balanced Reading Program

The plans for a balanced reading program should include options for various levels of readers. Traditional instructional levels of reading are listed below together with the courses outlined in the *English Language Arts Curriculum Framework, K-12,* Texas Education Agency Publication, CU0 838 01, for students in Grades 9-12 who are identified as requiring that level of instruction:

Level of Instruction	Course Offerings
developmental	Reading skills taught in English I-IV
corrective	Reading Improvement and Correlated Language Arts I-III
remedial	Basic Reading Skills
enrichment	Developmental Reading

Developmental reading is continued at every grade level of the school program according to the developmental pattern of every student. In the elementary school, K-6, it is planned and scheduled as a separate course of study. In Grades 7 and 8, it may be integrated with the instruction in English Language Arts or may be scheduled as a separate subject. In the secondary school, it is designed to increase the efficiency of the average or better reader, particularly in reading speed, comprehension, and study skills. Class enrollment should not exceed 30 students.

A second course, Reading Improvement, is a course designed to improve reading skills of the reader who is from one to two years behind normal expectancy in reading development. Class enrollment should not exceed 20 students.

Basic Reading Skills is a course organized to provide instruction for students who are two or more years below the expected achievement level in reading development. Intensive instruction is needed to alleviate multiple problems such as faulty visual perception, unfavorable attitudes, inadequate basic reading skills, disorganization in reading and study habits, short attention span, and other learning difficulties. This program may require the assistance from speech, vision, medical, guidance, and psychological professionals.

Basic programs differ from Reading Improvement and developmental programs in

- the extent and depth of diagnosis
- the individualization of instruction
- the complexity and variety of treatment approaches

Small groups no larger than 20 students will enable the reading teacher to individualize instruction and give consideration to careful diagnosis of individual problems to the extent necessary to bring about the desired results.

Evaluation of Reading Development

Evaluation should be continuous and should be an integral part of the instructional planning procedure. There should be a variety of ways to evaluate the students' abilities and development. Teacher observation, interest inventories, diagnostic checklists, and student interviews should be combined with informal reading inventories and criterion-referenced or standardized reading tests. Major uses of tests in the reading program are

- determining students' instructional reading levels

- diagnosing reading skills
- estimating reading growth
- evaluating the instructional program (9:12)*

At one time educators accepted the results of standardized tests as valid indicators of students' reading ability. Greater significance is now attached to factors not measured by most tests and to the fact that available tests may not be valid measurement instruments for all students. A variety of procedures, however, can help the teacher make a reasonably accurate estimate of students' skills, capabilities, and needs.

Group tests, such as criterion-referenced tests, may provide information for instructional planning. They are useful in comparing students in terms of general reading achievement and in providing information for the selection of methods, materials, and procedures for further evaluation. Individual conferences and informal reading inventories are more appropriate for determining specific skills weaknesses or strengths.

Teachers need to define their teaching objectives and select or construct a test that measures those objectives. The teachers should follow a specified guideline to select a test that

- validly measures what has been taught
- represents the component parts of reading development defined in the curriculum
- approximates the difficulty level of the selected group. (Difficulty level should also include the directions to be read by the students.)
- includes measures of gain over an appropriate period of time

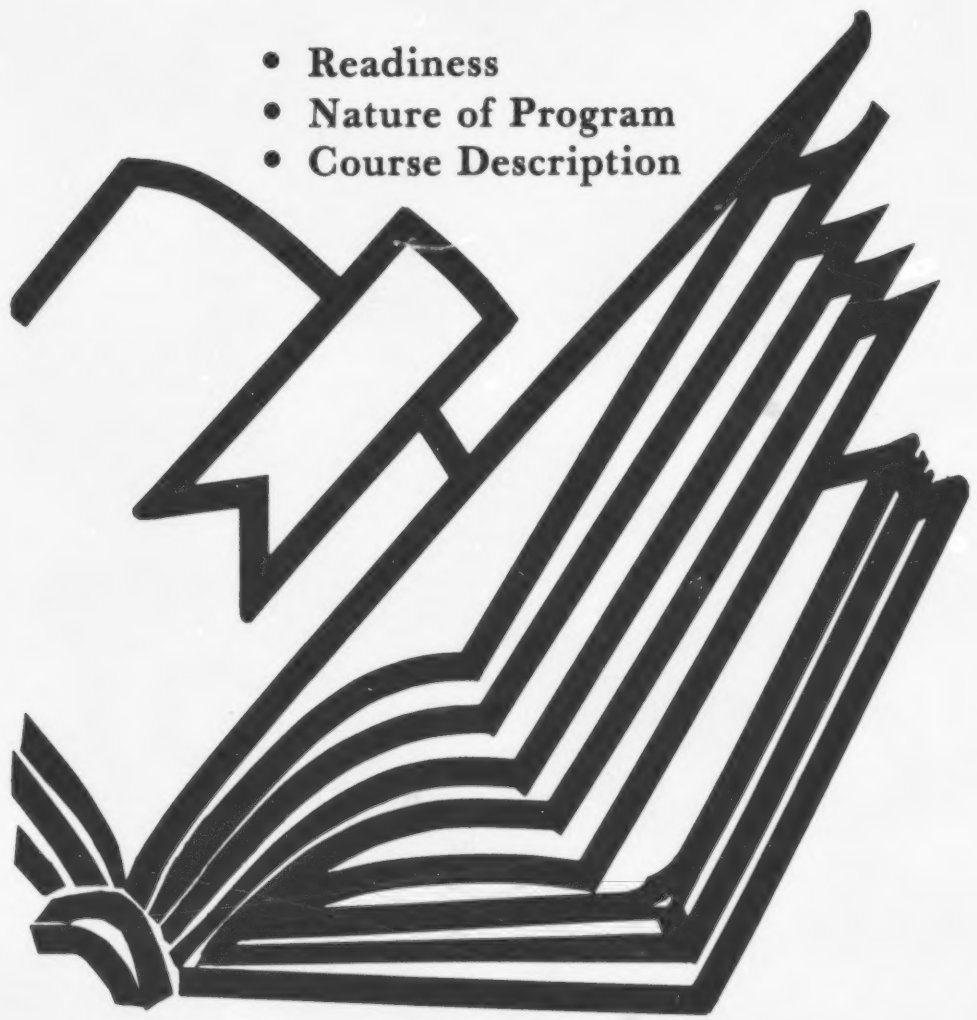
*The first number designates the reference in the bibliography. The second number notes the page from which the quotation is taken.

"I believe that just opening any book eagerly and allowing the people in it to become you is the greatest gift in the world."

Julia Cunningham

Developmental Reading

- Readiness
- Nature of Program
- Course Description



Developmental Reading

The term developmental reading is used to refer to the general reading program in which the school provides for the sequential and systematic development of reading skills for all the students at every level.

There is unquestionably a need for developmental reading programs in secondary schools. Upon reviewing more than 180 research studies on the trends and practices in secondary school reading programs, A. Sterl Artley, noted reading authority, reported the following findings of which secondary teachers and administrators, indeed all educators, should be aware:

- A decline in reading growth was noted in junior high results from the lack of systematic reading instruction beyond Grade 6 and from the lack of good reading teachers.
- Students' emotional, physical, and intellectual competencies, as well as their reading purposes and communication abilities, are directly related to reading growth.
- The secondary reading programs that do exist are largely for handicapped readers.
- Suggestions for general program improvement include close integration of reading and content area material, sequential development that provides for individual needs in all areas of reading growth, and complete staff involvement.
- The use of a variety of reading materials and methods, both mechanical and textual, was recommended.
- More well-trained teachers and books with contemporary themes are needed (2:14).

It is recognized by most administrators and teachers that the students in secondary school need or will benefit from extended reading instruction. Ability to read can be improved and, for many students, continuing growth and improvement in reading are essential for success in coping with school reading assignments accurately and expediently. Even students who have the necessary reading skills required to deal with their present instructional materials, if their reading skills are not extended and refined, may experience some difficulties in dealing with reading assignments at a higher level. Increasing the reading demands made upon students involves the students' not only performing at a higher level in terms of quality and thoroughness but also their dealing with larger amounts of material.

Readiness

Reading readiness is considered important at the beginning stages of reading. However, there is a growing awareness that readiness for reading is an important factor at all levels. Readiness in reading is usually thought of in terms of the reading instruction the student is ready and able to profit from; it should perhaps also be thought of in terms of the teacher's readiness to provide appropriate instruction.

Student Readiness

Readiness in reading for the secondary student is related to the student's mental ability, emotional and social adjustment, general health and physical well-being, development in language, and socioeconomic status. Student variability on each of these factors is recognized by teachers at every educational level. Students vary also in their degree of readiness in reading in such areas as vocabulary development, word recognition, word-attack skills, silent and oral reading, skills of comprehension, and work-study skills.

The students' level of development in the various skills of reading indicates the level on which instruction may be started with reasonable expectations that they will experience success and a subsequent increase in their performance. Instruction which demands of the students that they perform beyond their levels of development denies their state of readiness for reading and seriously endangers the prospects for the extension and refinement of reading skills and, perhaps, educational growth in general.

Teacher Readiness

The teacher's readiness for teaching reading has a great deal of bearing on the general effectiveness of the reading program. Of course, a part of each teacher's readiness in teaching reading involves, for example, knowledge of methods of teaching reading, instructional equipment, and the scope and sequence of the various reading instructional tasks.

Leo Fay, past president of the International Reading Association, has indicated that the teacher's readiness is as significant as that of the students and has cited the following factors as being important elements of teacher readiness:

- Knowing the capabilities and achievements of one's students
- Knowing what is demanded in reading a particular content
- Knowing what specific selections will involve in the way of background information and reading skills. When reading a text or a reference, the teacher then is concerned not only with the information or the content it contains but is also interested in such things as the background the author assumes the reader possesses to derive understanding from the passage, the vocabulary problem the students might encounter, and the aids to understanding found in the reading material. These and other factors are involved in the problem of teacher readiness. (10:13)

Nature of the Program

The best developmental reading program for a particular school would be one which by design is tailored to meet the diverse needs of its students. Despite the fact that few reading programs are identical in scope or operation, there are some basic conditions that should be met in all programs. Meeting the following basic conditions suggested by Robert Karlin, author of textbooks on secondary reading, should go a long way toward providing assurance that a good program is in operation.

- A good program reaches all the students who can benefit from reading instruction.
- The entire faculty contributes to the reading program's effectiveness and operation.

- A sound reading program embraces all aspects of reading.
- Attention is directed to specific reading needs.
- Evaluation of the program's effectiveness is continual and modified according to the evaluation.

Through continuing instruction in the basic skills of reading on a systematic and sustained basis, it should be possible to reinforce those skills students have already acquired and to extend and refine these reading skills to the degree necessary for the students' enjoyment and comprehension of reading materials that become increasingly more difficult and complex at higher grade levels (14:333).

Basic reading skills that should be included in the developmental reading program in the secondary school are

- word recognition
- vocabulary
- oral reading
- comprehension
- work-study skills

Word Recognition

Skill in the use of the techniques of word recognition is needed by readers when they encounter a word they are unable to identify quickly. Secondary school students having average or above-average ability in reading do not, as a rule, experience much difficulty in recognizing words. It is the low-ability reader who will need extensive instruction in skills of word recognition. An instructional program for the improvement of word recognition skills includes teaching the use of the following:

- sight method or sight vocabulary
- context clues
- phonics
- structural analysis
- the dictionary

Sight Method. The sight method or sight vocabulary enables the reader to identify known words quickly. To identify words that are not readily recognized, the reader will need to use singly or in some combination word recognition techniques. Given repeated exposure to particular words that present recognition difficulties, the student should eventually make those words a part of his or her sight vocabulary. As the reader's sight vocabulary increases, reading will become an easier and more enjoyable activity.

Context Clues. The use of context clues as an aid to the identification of unfamiliar words and to the development of meaning is not only an effective tool but one of the quickest word recognition tools available to the reader. However, the student should not be encouraged to use context clues alone in unlocking strange words. The student should gain control of other aids that will provide the help context cannot supply.

Skillful use of context is acquired through frequent practice. The student is reminded to identify an unfamiliar word and to determine its meaning by reading that which comes before and that which follows the word in question. If the context is not sufficiently strong, the student will need to use other word recognition techniques such as phonic or structural clues to identify the unfamiliar word. The use of context clues along with other word recognition techniques is to be encouraged because the number of possible responses is increased, accuracy in word identification is enhanced, and students who demand meaning from their reading should make fewer word substitutions that change the meaning of the text. Following are examples of exercises recommended by Karlin in which the context provides a definite clue to the unfamiliar word and phonic or structural features suggest other clues.

- Using the beginning consonant sound of unknown words with the context:

  We climbed to the top of the hill.

  The doctor visited his patient in the hospital.

- Using beginning consonant blends and the context:

  The color of the walls was dark brown.

  The tiger tried to claw his trainer.

- Using beginning and ending consonant sounds with the context:

  The scout pitched his tent along the bank of the river.

  The jet airplane flew 1,000 miles in two hours.

- Using word structure and context clues:

  The moon (disappoint, disappeared) behind the clouds.

  Atomic explosions release radioactive particles.

- Using phonics and word structure with context clues:

  Over two hundred persons heard the lec$^{\text{ture}}_{\text{tern}}$ about man and the space age.

  Some persons have predicted the world will end (14:122).

Phonics. Some students, even though they are in secondary reading classes, may need instruction in phonic analysis. When the students use phonic clues as an aid to identifying unfamiliar words and arriving at the correct pronunciation, they employ knowledge of letter-sound association to separate the word into its basic sounds. The letter-sound associations students will need to have mastered are the sounds of

single consonants; consonant blends; consonants diagraphs such as sh, ch, and ph; short and long vowels; double vowel combinations such as oa, ea, oi, ou, oo, and ee; and the sounds of vowels when the vowel precedes the letters w or r as in flew and fir.

Structural Analysis. In the secondary school the teaching of structural analysis or the use of word-structure clues as an aid in the recognition and pronunciation of unfamiliar words is an important instructional area. Ned S. Marksheffel, (18:206), frequent presenter for reading conferences, cites the following seven reasons for successfully teaching structural analysis as an important word recognition skill to students in secondary schools.

1. Corrective readers in high school generally know little about the structure of words.

2. High school textbooks contain many polysyllabic words (words of more than three syllables), and inefficient readers usually skip over polysyllabic words without ever trying to pronounce them.

3. The use of structural analysis is usually a quicker method of identifying and recognizing words than phonetic analysis is.

4. Students have little difficulty in learning to recognize prefixes, suffixes, and root words.

5. Many students have no idea of what is meant by *syllables* or the role syllables play in word structure.

6. Syllables transfer to many words.

7. A knowledge of roots, prefixes, and suffixes contributes not only to improvement in word recognition but also to improvement in spelling, speaking, and writing.

Secondary school students may have difficulty identifying and correctly pronouncing some unfamiliar words because they are deficient in their knowledge and use of the structure of words. For example, a student may recognize the word *function* without difficulty but may be unable to deal with the word *malfunctioning*.

Instruction in structural analysis includes teaching inflected and derived forms of words, compound words, and syllabication. Inflected words indicate tense, comparison, person, number, gender, and possession. Inflected words are formed by adding inflectional endings to a root word. The common inflectional endings are s, es, ess, er, est, en, and ing.

Derived words are formed by adding a prefix or a suffix or both to a root word. It should be noted that prefixes and suffixes have their own particular meanings and, attached to a root word, may cause the meaning of the derived word to be different from that of its root word. For example, compare the meaning of *finished* with *unfinished*.

Compound words are created by combining two words to form a single word. The spelling of the words used to create the compound word is not altered, but the meaning of the compound word may or may not be the same as that of the words that were combined. Students should learn to recognize compound words and the known whole words in compound words, to build compound words, and to recognize and know the meaning of contractions as a special kind of compound word.

Syllabication is the process of dividing words into syllables. Usually each syllable will contain one or more consonants associated with a vowel sound as in the word in-tem-per-ate. However, a syllable may consist

of a vowel or diphthong alone, or a consonant alone, or of either a vowel or diphthong with one or more consonants. For example, mercurial (mer-kur'-i-al) contains a syllable consisting of the short sound of i; oily (oi'-le) contains the diphthong oi as a syllable; and in riddle (rid'-l), the consonant l is a syllable. Some one-syllable words may, to some students, seem to have more than one syllable. Consider delft, stealth, theft, and twelfth which are each one-syllable words.

To divide words into syllables, students need practice in transferring their knowledge of spoken syllables to printed syllables. Students should be helped to acquire an understanding of the concept of syllables and to auditorily detect the number of syllables in a word, and they should be given practice in pronouncing words to determine the number of syllables they hear.

Use of the Dictionary. When the students encounter an unfamiliar word which they are not able to identify and pronounce correctly with the aid of other word recognition techniques, they will need to use the dictionary. The process of using the dictionary involves finding the general section in which the word appears, using knowledge of the alphabet to locate the word, using the diacritical marks and, if necessary, the pronunciation guide to pronounce the word, and selecting the appropriate meaning.

Learning to use the dictionary efficiently as an aid to word recognition is important, but the dictionary also contains a great deal of information that can help students be more successful in their studies. Unfortunately, some students have not acquired the skill needed to use the dictionary effectively and many do not have an appreciation of the wealth of information available in the dictionary. All students should be made aware of the fact that the dictionary is the book to go to for help on spelling, capitalization, syllabication, pronunciation, and word meanings. The dictionary is also helpful because it can give the student the etymology of words, grammatical information, synonyms and antonyms, and the meaning of phrases or figurative language.

Reading Development

Vocabulary Development. The four vocabularies students possess are those used in listening, speaking, writing, and reading activities. Students should try to enlarge these vocabularies, and teachers should provide meaningful language experiences in the classroom along with sufficient review of new words to assure continuous growth in vocabulary.

John Simmons, author of numerous articles on secondary reading, refers to other vocabularies that teachers are responsible for helping students develop: general, technical, and special vocabularies. General vocabulary refers to that store of words students own, add to, and use in the everyday activities of their lives. One of the hoped for characteristics of maturing individuals is that their general vocabulary becomes more specific, complex, and precise. Teachers in all content areas, through direction of both written and oral activities, must help students to become more at ease with the word stock of serious adult discourse.

Each content area, from upper elementary grades to graduate school, contains a large store of technical terms. These terms relate directly and usually exclusively to the content area in question. For the English teacher they are "onomatopoeia," "intransitive," and "conjunction"; for the mathematics teacher they may be "subtrahend" or "parabola." Whatever the area, teachers in the various content areas are obliged to inventory these technical terms used in their course, to be aware of those introduced at earlier grade levels, and to provide clear, workable definitions for those terms they utilize in their instruction.

Also in each content area a large amount of specialized vocabulary is frequently used. Specialized terms are those words that have a commonly known denoted meaning but that have very different and highly specific definitions when used in the context of a given content area. A mathematics teacher, for example, assigns a definite meaning to the word *product* which is far different from the equally precise meaning assigned to it by the teacher of social studies. Thus, each teacher must become fully aware of the special problems of connotation his or her subject matter may create (21:17).

Many students who are able to read narrative materials have serious problems dealing with the vocabulary they encounter when reading textbooks in various content areas. Lack of familiarity with technical and special words adversely influences the student's ability to gain concepts and general understanding and may promote an unfavorable attitude toward reading and study. Teaching the technical and specialized vocabulary of each content area should enable most students to read school materials with more success. Fortunately, subject matter teachers should have no particular difficulty in providing the needed instruction even though they may not be reading specialists.

Oral Reading. Oral reading deserves a place in the reading program. It is a functional skill secondary school sudents will be able to use in all content areas.

Ideally, oral reading should be done in audience-type situations. If an audience-type situation is to be achieved, the reader should not be asked to read orally materials that have already been read by the rest of the class. The material should be new to the listener, and it should be of interest and of value to the listener. The reader's preparation will involve pre-reading the material silently, and it may also, on occasion, be necessary for the reader to actually follow the silent reading with an oral rendition for practice. Adequate preparation for oral reading will enable the reader to

- pronounce words correctly and distinctly
- determine correct phrasing
- determine the meaning of unknown words
- comprehend the material
- read in a relaxed manner with enough volume so that all may hear

All subject-area teachers should provide opportunities for their students to read orally. Students should be encouraged and helped to prepare for oral reading so they may be spared the embarrassment, stress, or frustration often experienced when the oral reading is not well done.

The purposes for which oral reading may be done can be motivating to both the reader and the listeners. Motivation is enhanced partly because the reader has prepared to read the material and the listener has not previously read the material; therefore, the purpose for the reading can be relevant and functional.

The purpose for which oral reading might be done can be illustrated by listing some appropriate activities, including

- bringing pleasure to others through the reading of poetry, jokes, riddles, and lines of conversation from plays and stories
- choral readings

- bringing information to others
- proving an answer or a point of view
- clarifying difficult ideas or concepts
- reading radio and television scripts
- reading announcements
- reading directions
- reading minutes of meetings

Comprehension

Comprehension in reading is meaning gained from the printed word, and knowledge of the meaning of the individual words is the first essential to comprehension. The reading-thinking process then involves the fusing of words into meaningful phrases and the integration of those phrases into a complete thought or idea. The complete thought is usually expressed in a sentence. With practice, readers become able to identify the sentence of a paragraph that expresses the main idea and to also sense the interrelationships that exist between and among the sentences in the paragraphs that provide details supporting or explaining the main idea. In a like manner, each paragraph in an article is related to the general overall idea of the particular article, and able readers have developed the ability to sense the relationships between and among paragraphs.

With guided practice students become able to read an article with enough comprehension to get from the reading at least three things: first, the main idea of each paragraph; second, the supporting details; and, third, the general idea of the whole article. As the students gain in reading maturity they are able to comprehend reading materials of greater difficulty and complexity.

Unfortunately not all secondary school students are mature in even the relatively simple basic comprehension skills. Surely all secondary teachers are aware of the difficulties many students have in understanding directly stated ideas, not to mention ideas that are implied or indirectly stated. What teacher does not have students who are able to read and tell about what was read but when questioned for further explanation reveal at most only a superficial understanding of what was read? Such difficulties in basic comprehension apparently are related to insufficient guided practice in the skills of comprehension in the junior and senior high school, and perhaps in some instances in the upper elementary grades. The difficulties are, of course, directly related to deficiencies in understanding word meanings, concepts, sentence structure, and paragraph structure.

Main Ideas and Details. Reading to locate the main idea of a paragraph is an important comprehension skill. But ability to detect only the main idea of a paragraph represents a low level of performance in comprehension. In addition to getting the main idea, the student should be able to recognize the details that support or explain the main idea. Students who are able to detect both the main idea and details can get the literal meaning of a paragraph. Ability to comprehend at the level of the main idea and details represents the lowest expectations for high school students. Students who have these two basic comprehension skills are able to relate facts that are stated directly. Thus, they are able to read paragraphs

and give satisfactory answers to Who? What? Where? and When?; but they may have some problem with the Why? and even greater difficulty dealing with implied meanings, or with drawing conclusions and making inferences.

Most secondary students are able to find main ideas and supporting details; however, at times the reading behavior of some of these students indicates otherwise. One possible reason is that they may not have had sufficient guided practice with materials of increasing complexity and level of difficulty as they progressed through the grades. Another reason may be that they have not had enough guided instruction and practice in finding the main ideas and details in different positions in paragraphs.

Usually, the main idea of a paragraph is to be found in the first sentence, the remainder of the paragraph being devoted to the supporting details. Sometimes the last sentence may be a summary statement or a restatement of the main idea. But that is not always the case. The next most popular place for the main idea is the last sentence. Sometimes the main idea is buried in the middle of the paragraph and perhaps surrounded by relevant details. On occasion, the main idea is implied and not directly stated. That is quite often true of narrative or descriptive paragraphs.

Ability to identify main ideas may be better developed by having students

- select from several statements the one that best expresses the main idea of a paragraph or of an entire selection
- select from several titles the one that seems to be the best title for a selection
- identify the particular sentence in the paragraph in which the main idea is stated
- write a summary statement of the main idea of a paragraph or an entire selection
- read a paragraph for the purpose of determining the sentence that expresses the main idea, whether the other sentences support the main idea, whether the main idea is well developed, and what point the writer is trying to put across to the reader

Ability to identify supporting details may be better developed by having students do exercises such as the following:

- Provide students with a specific question that can be answered *as they read* a paragraph or a selection.
- Have students answer specific questions *after they read* the paragraph.
- Have students locate details that support the main idea of a paragraph.
- Have students write out the supporting details as they read a paragraph.
- Have students write a paragraph based on the main idea and supporting details provided by the teacher.
- Have the students make decisions regarding the relevancy or irrelevancy of supporting details.
- Have students set down the main idea and the supporting details of a paragraph or selection in outline form.

Critical Reading. Critical reading is a term that has not been defined to the satisfaction of all reading authorities, and some authorities prefer to refer to critical reading by using other terms; for example, critical evaluation, creative reading, inferential reading, reading between the lines, and the like. Marksheffel (18:250) has provided a definition of critical reading that should be acceptable to most teachers, at least for practical purposes. He defines critical reading as "purposeful reading in which the higher-level thinking processes are used in making sound judgments on the basis of all available evidence."

Critical reading requires the use of higher-level skills that enable the reader to go beyond the literal meaning intended by the author.

The lower-level comprehension skills include, in part, the following:

- selecting the main idea
- recognizing relevant details
- following directions

The higher-level comprehension skills include, in part, such skills as:

- recognizing the author's purpose
- recognizing the author's tone, mood, intent, and biases
- drawing conclusions and inferences
- predicting outcomes
- distinguishing between fact and opinion
- evaluating the integrity of the publisher, the qualifications of the author, and the effect of the date of publication on the accuracy of the content
- seeking answers to questions such as:
  - Who would have me believe this?
  - Who would benefit from my believing this?
  - Why should I believe this?
  - To which of my needs (political and economic security, acceptance by others, excitement) is the author appealing?
- recognizing whether the author is using deductive or inductive reasoning
- recognizing the use of irrelevant data, false analogies, over-generalizations, half-truths, emotional and informational language, sarcasm, and quotations out of context for the purpose of distorting ideas
- recognizing the devices of propaganda such as name-calling, testimonials, glittering generalities, transfer, card stacking, and the bandwagon technique

The list of lower-level comprehension skills may be seen to be somewhat mechanical and straightforward; whereas the higher-level comprehension skills or critical reading skills require high-level thinking and are definitely not mechanical or straightforward. The ability to think critically is surely essential and basic to critical reading. It would seem that students who are able to think critically (without the stimulus of printed material) should be able to transfer that skill to printed material, or, to put it another way, to do critical reading.

Most students will need help on how to read critically. Critical reading skill is not likely to be very well developed among secondary school students without direct teaching. Students need to have many opportunities to practice reading critically in situations that arise naturally from class discussions of materials read in the content fields. Teachers must, of course, plan to help and remind students to read critically. No one should expect many students to become skillful in critical reading by simple admonitions to read critically. Instruction must be provided to develop this skill. Ability to read critically is one of the most important goals of reading instruction.

Flexibility in rate of comprehension. In terms of rate of comprehension most students are not very efficient. The average rate of comprehension for high school seniors is about 250 words per minute (wpm) at 70 percent level of comprehension. Of course, freshmen, sophomores, and juniors read at somewhat slower rates. It has been reported that the average reading rate for freshmen is about 214 wpm, 224 wpm for sophomores, and 237 wpm for juniors. They not only read too slowly, but they tend, in general, to read everything at the same rate.

Students who are able to read some 100-150 wpm faster than the average rate have distinct advantages over the slower reader. The rapid reader is likely to find it less difficult than the slow reader to concentrate in reading situations. Rapid readers will need considerably less time in which to do assigned readings; they will have more time for doing collateral reading and recreational reading; and, when taking teacher-made or standardized tests, they may spend more time thinking out answers and less in reading test items. Certainly, "good" slow readers are at a distinct disadvantage compared with students who are "good" rapid readers.

Secondary school developmental reading programs should provide training and practice to increase the students' rate of comprehension.

With training, most students would have little, if any, difficulty in achieving a 50 percent increase in reading rate. Actually, given the opportunity to do so, many students would achieve higher percentage increases. Moreover, they would learn that they are able to read just as well at a fast rate as at a slow and perhaps plodding pace.

In a program designed to increase reading rate, it is important to remind students frequently to read with understanding. It is the students' rate of comprehension that teachers are interested in improving. It is not wise to provide training or practice in which comprehension is sacrificed in favor of rate. It is equally unwise, because of individual differences, to fail to arrange the program so that students compete with themselves and not against the class or an arbitrary goal that has been set by others.

Students participating in a program to increase rate of comprehension will need to be encouraged to concentrate intently and to remember ideas. They will also need to be reminded to adjust their reading rate to suit their purpose for reading and the type of material being read. When skimming to locate specific information or when reading easy, interesting material, the fastest rate the student is capable of could be used; but when reading in mathematics, for instance, a much slower rate would be more appropriate. In general, though, the goal is to help students comprehend whatever they read as rapidly as it is possible for them to do so.

Work-Study Skills

The term work-study is used here to refer to those skills students use when trying to locate information and when they intend to do something with the content of that which has been read. Basic to the development of and the independent application of work-study skills is the ability of students to read with understanding. It should not, however, be assumed that students who are able to read with understanding have acquired and applied work-study skills well enough to deal successfully with secondary school study materials. Most secondary school students will need instruction in using adult or secondary level dictionaries, references, the card catalog, periodic indexes, and various special materials such as graphs, charts, maps, and the like.

Work-study skills are employed for such purposes as gathering information, using information, and retaining important ideas. They are functional skills, and when students are applying work-study skills they are reading functionally. Some think that work-study skills should be taught as a separate course; whereas others think they should be a part of the course in developmental reading. In view of the practical and functional nature of work-study skills it would seem to be highly desirable for all content area teachers to provide instruction and practice in the work-study of their subject. Each teacher should accept the responsibility of providing direct instruction of the work-study skills essential to study efficiently the content area he or she teaches. In each content area, the students should not only be guided in learning the subject matter, but they should also be shown how to study the subject and how to use the tools of learning that particularly apply to study of that subject.

Some of the work-study skills in which secondary school students should acquire proficiency include

- locating information
- using alphabetical arrangement
- using the dictionary
- using library classification systems
- using the card catalog
- using *The Reader's Guide to Periodical Literature*
- using reference materials (atlases, encyclopedias, almanacs, bibliographies)
- using book parts (title page, table of contents, chapter headings, topical headings, summaries, index, glossary, and appendix)
- using special materials (pictures, maps, globes, charts, tables, and graphs)

This list is not exhaustive, but it indicates some of the specific work-study skills.

A work-study skill that students should acquire and be able to use with a high degree of proficiency is a technique of study. Good techniques of study enable students to be efficient and productive during periods of study. A good study method, and one which seems to have been widely accepted, is the SQ3R method. SQ3R stands for the five steps the student follows in using the method. They are (1) survey, (2) question, (3) read, (4) recite, and (5) review. The SQ3R study method is designed to aid the student in retention and rapid, efficient recall of the essential ideas of reading. It is not a difficult procedure to learn.

It is only one possible method of effective study, and it may be modified somewhat by teachers and students to meet study purposes and courses. The plan of the SQ3R study method, described in steps, follows:

Survey 1. Glance over the headings in the chapter to see the few big points which will be developed. Also read the final summary paragraph if the chapter has one. This survey should not take more than a minute and will show the three to six core ideas around which the discussion will cluster. This orientation will help you organize the ideas as you read them later.

Question 2. Now begin to work. Turn the first heading into a question. This will arouse your curiosity and so increase comprehension. It will bring to mind information already known, thus helping you to understand that section more quickly. And the question will make important points stand out while explanatory detail is recognized as such. Turning a heading into a question can be done on the instant of reading the heading, but it demands a conscious effort on the part of the reader to make this a query for which he or she must find the answer.

Read 3. Read to answer that question; i.e., to the end of the first headed section. This is not a passive plodding along each line, but an active search for the answer.

Recite 4. Having read the first section, look away from the book and try briefly to recite the answer to your question. Use your own words and name an example. If you can do this you know what is in the book; if you can't, glance over the section again. An excellent way to do this reciting from memory is to jot down cue phrases in outline form on a sheet of paper. Make these notes very brief!

Now repeat steps 2, 3, and 4 on each succeeding headed section. That is, turn the next heading into a question, read to answer that question, and recite the answer by jotting down cue phrases in your outline. Read in this way until the entire lesson is completed.

Review 5 When the lesson has thus been read through, look over your notes to get a bird's-eye view of the points and of their relationship and check your memory as to the content by reciting on the major subpoints under each heading. This checking of memory can be done by covering up the notes and trying to recall the main points. Then expose each major point and try to recall the subpoints listed under it. (19:29-30)

Course Description

In Texas the developmental reading program is designed to be a part of the English curriculum and the course, Developmental Reading, is an elective course planned for students who require an enriched program. A course description from the *English Language Arts Framework K-12,* Texas Education Agency Publication CU0 838 01, is presented. For students who are reading on or above grade level, this course should include the following elements:

- emphasis on one or more skills such as critical-creative reading skills, library and study skills, rate and flexibility
- continuous appraisal both by teacher and student

- variety of materials
- provision for individual pursuit of reading interests

Upon completion of this course, the student should be able to:

- set a purpose and rate for reading a variety of materials
- utilize reference aids for locating information and preparing manuscripts
- describe and pursue particular reading interests
- read a variety of materials with critical understanding
  - understand implied ideas
  - recognize differences in the purpose of illustration and of example
  - infer writer's purpose and point of view, particularly in content materials
  - recognize whether the author is using deductive or inductive reasoning
  - evaluate the integrity of the publisher and the effect of the date of publication on the accuracy of the content
  - infer mood
  - sense motives
  - compare viewpoints on the same topic
  - select ideas on basis of criteria
  - classify devices of persuasion
  - judge and analyze logical validity
  - demonstrate creative thinking
  - understand character roles
  - recognize and analyze subtle emotional reaction and motive of characters
  - use knowledge of character and motivation
  - predict outcomes
  - predict details
  - use word connotations and denotations of author to limit the reader's visualization
  - view literature as a reflection of its culture

- perceive influence of different elements within selection
- sense subtle humor and pathos
- elaborate on ideas presented
- suggest other solutions
- test hypotheses
- communicate result

"Reading not only is a means of learning, but it provides great entertainment. The wide variety of interest and adventures shared with us by the authors pave the way for our own dreams and aspirations."

Bill Bradley

Adjusting Instruction For Academic Differences

- **The Reading Improvement Program**
- **The Basic Reading Skills Program**
- **Reading for the Gifted and Creative Student**

Adjusting Instruction For Academic Differences

The Reading Improvement Program

Reading Improvement is a course designed to improve reading comprehension and study skills. In secondary schools, it is estimated that one-third to one-half of all students need corrective instruction. Extremely slow rate, lack of ability to adjust rate to purpose, paucity of vocabulary, difficulties in organizing and comprehending, marked lack of interest, poor perceptual or word recognition skills, and weakness in word analysis are some of students' more common deficiencies in skills and habits. Reading Improvement is a course designed to meet the needs of students having some difficulty in one or more of these areas.

Criteria for Enrollment in Reading Improvement Classes

Reading Improvement courses are intended to help the student overcome one or two major reading difficulties. The course is planned for students who are one to two years behind normal expectancy in the development of their reading skills. One-half to one unit credit is given for a minimum of 65 clock hours in the semester plan. Class enrollment should not exceed 20 students.

Content and Teaching Methods

Instructional plans should be based on appraisal of individual needs. Formal and informal methods are used in the assessment of

- vision, hearing, speech
- word recognition skills
- vocabulary and spelling
- oral and silent reading comprehension
- listening comprehension
- rate and flexibility of reading
- study habits and skills
- locational skills
- reading interests

Throughout the course, many techniques are used for evaluation of the students' progress. Students are involved daily in the evaluation process: appraising needs, setting goals, testing skills, determining at-

titudes, and keeping records of progress. The teacher observes group and individual reading behavior and makes changes in instructional plans as needed.

Organization

Although teaching emphasis may shift from lesson to lesson and within a single lesson, instruction in vocabulary, word recognition, comprehension, and other skills is included in most lessons. A daily or weekly routine, including out-of-class practice, is established early and maintained throughout the course. Practice on selected skills to supplement the scheduled lesson is desirable.

The course may be scheduled in several ways. It may meet daily or at other specified intervals. To meet specific needs in scheduling, some schools are designing minicourses in reading improvement.

Instructional Materials

A variety of reading materials are used for instruction and practice. They may include

- textbooks
- work-study texts
- multilevel and multiskill materials
- library books
- materials for projection
- self-instruction materials

Mechanical and electronic devices may be employed for individual and group instruction. Teacher-made materials such as charts, diagrams, inventories of interest and skills, and progress records are also being used. A dependence upon a single type of material is not advisable. The classroom facilitates the instruction planned. Desks and tables are arranged so that students may work together or individually.

Closed storage, vertical files, and book shelving are adequate for the materials and equipment. Display areas are used for motivation, for records of group progress, and for instruction. If mechanical or electronic devices are used, electrical outlets, and viewing areas are convenient and appropriate.

Course Description

The following is the course description as outlined in the *English Language Arts Framework K-12,* Texas Education Agency Publication CU0 838 01:

For students who are reading one to two years below their assigned grade levels this course should include the following elements:

- pre- and posttesting to determine student needs and progress

- continuous appraisal of individual needs both by teacher and student to determine specific individual instructional programs that address the following:
  - word recognition
  - vocabulary and spelling
  - oral and silent reading comprehension
  - listening comprehension
  - rate and flexibility of reading
  - study habits and skills
  - locational skills
  - reading interests
  - variety of multilevel materials
- emphasis upon developing competency in exit level skills listed in *Essential Reading Objectives* TEA Publication GE0 832 01

Upon completion of this course, the student should be able to:

- identify the main idea
- recall specific facts and details
- arrange a list of events in sequence
- identify story events
- use facts to answer specific questions
- perceive cause-and-effect relationships
- differentiate between figurative and literal language
- evaluate and make judgments on the basis of information given
- distinguish between fact and nonfact
- recognize various persuasion devices
- make inferences and draw logical conclusions
- arrive at a generalization from a given series of details and/or assumptions
- predict outcomes

- predict details
- judge logical validity
- choose the appropriate meaning of multimeaning words
- follow written directions involving subordinate steps
- use the various parts of a book and various kinds of books as aids in locating information (e.g., title page, table of contents, preface, index, dictionary, telephone book, encyclopedia)
- use graphic sources to get information (e.g., tables and lists, charts and graphs, maps and globes, pictures and diagrams, scale drawings, transportation schedules)
- use standard reference books
- organize information
- use footnotes, cross references, and appendixes
- respond with understanding to printed materials normally associated with government and law (e.g, traffic citation, voter ballot, jury summons, subpoena)
- choose items for purchase on the basis of such written information as labels, newspaper and catalog descriptions
- recognize and understand the vocabularies associated with a variety of occupations, special interests, and hobbies

The Basic Reading Skills Program

Basic reading instruction may be needed for as many as 10 to 25 percent of secondary students. These students lack basic reading skills but show no evidence of major physical, psychological, or neurological impairment. Their skill weakness can be corrected in small classes by a teacher with special training in reading instruction. Another 1 to 5 percent of the students may evidence physical, psychological, or neurological impairment. They can be properly treated only in a clinical setting.

Terminology used by various writers to describe individuals whose reading achievement is below their ability varies from one investigator to another. Reading retardation, reading disability, and reading deficiency are synonymous terms.

Causes of Reading Disability

Reading disability may be the result of multiple causation. The causes may be physical, intellectual, emotional, or educational.

Physical factors. Physical handicaps to learning to read include visual and auditory handicaps. There is sufficient positive evidence to indicate that such defects as farsightedness, binocular incoordination, and other visual problems may contribute to reading difficulties in certain cases. Vision screening is recommended for the low-ranking third of every class. Students may fail to read because of physical discomfort in looking at the printed page and/or reading machine.

Hearing loss and fluctuation in auditory acuity may impede reading progress. Difficulty with letter sound association of consonants occurs in certain high or low tone loss of hearing.

General health must be considered as a factor in the study of reading problems. Any condition which lessens energy, distracts, or makes a person uncomfortable may interfere with learning. Asthma, allergies, rheumatic fever, etc., all may be responsible. Improper diet or malnutrition may be casual factors. Students who have chronic conditions cannot devote full attention to learning. Ill health and the absences from school which it causes, or the interaction of both, often limit learning.

Intellectual factors. Recent studies have been made about intelligence and general learning ability, including ability to read. Students with reading disability may score significantly lower on group tests than on individual tests. Teachers may use standardized reading tests and criterion-referenced tests to compare potential reading ability with present indications of ability. Teachers' observations with various informal instruments of measurement should prove beneficial in assessing capacity. The basic reading classes in secondary schools are usually offered for the normally intelligent. Slow-learning or mentally retarded students' needs are best met in adapted instructional programs in the developmental programs or in special education programs.

Emotional factors. Emotional maladjustment may be a cause or an effect of reading disability. Constitutional factors, pressure of environment, and failure in reading may be considered as interacting. High anxiety and low self-esteem in adolescents can prevent attention to new learning stimuli. Consistent failure to achieve in the developmental program may be a contributing emotional factor.

Educational causes. The total instructional program of the school is a vital factor in reading achievement. Inadequate teaching, inappropriate methods, and disregard for individual differences may be

causes of reading failure. Secondary school teachers have had to face reading problems without preparation for teaching reading. Inservice programs and workshops as well as college credit courses now being offered should be available to teachers who have the responsibility of teaching reading.

Environmental factors. Certain conditions seem to promote characteristics that may lead to success or failure in reading. Habits of perceiving and thinking, individual values and aspirations are factors. Socioeconomic status has an effect on school performance generally but does not appear to be a cause of reading deficiency.

Principles of Basic Reading Instruction

There should be agreement among the staff as to what constitutes a basic reading program. Some schools have found the following principles to be of help in developing the program:

- The program is individualized to meet student needs.
- Appraisal is continuous.
- A variety of multilevel materials is available.
- Independent word recognition skills are emphasized.
- Students are involved in reading activities that stimulate their self-confidence and self-direction.
- Audiovisual equipment is utilized where appropriate.
- Materials are appropriate for the age and interests of students.
- Pretest and posttest records are kept for each student.
- A small student-teacher ratio is maintained.

Organization of the Basic Reading Program

The grouping of students in basic reading classes may be managed in a number of ways, but the grouping should be flexible. Groups may be formed on the basis of reading achievement, reading interests, grade placement, or specific skill development.

For basic reading classes, students should be selected whose comprehension in reading is lower than listening comprehension and whose classroom performance is below potential reading ability. Grades should be examined in each subject area for indication of achievement patterns that would provide clues to the students' reading ability. Other considerations should be test results, teacher recommendations, counselor referrals, and student requests.

Diagnosis of the Reading Problem

The basic reading teacher should have procedures for thorough study of the reading problems of the students. Identification of the students' achievement in reading development will be of benefit in the planning of the instructional program. Some of the sources of information might include

- study of the cumulative folder as to
  - scores on reading tests
  - health records
  - attendance records
  - anecdotal records
  - other test scores
- interviews
  - with counselor to secure results of any tests given
  - with teachers to gather information concerning student's success or failure in previous years
  - informal reading inventories

Course Description

The Basic Reading Skills course description outlined in the *English Language Arts Framework K-12,* Texas Education Agency Publication CU0 838 01, is as follows:

For students who are reading more than two years below their assigned grade levels, this course should include the following elements:

- pre- and posttesting to determine student needs and progress
- student programs designed on the basis of identified skill needs
- continuous teacher appraisal of skill needs
- variety of multilevel materials
- emphasis on independent word recognition skills
- activities designed to stimulate student self-confidence and self-direction

- emphasis upon developing competency in comprehension skills or skills listed as midpoint level skills in the *Essential Reading Objectives,* Texas Education Agency Publication GE0 832 01.

Upon completion of this course, the student should be able to:

- identify the main idea
- recall specific facts and details
- arrange a list of events in sequence
- recognize the similarities and/or differences with another selection
- distinguish between fact and nonfact
- draw logical conclusions
- write an appropriate conclusion to a given sequence of events
- predict probable future actions or outcomes
- summarize
- make generalizations
- use figurative speech
- understand characters and setting
- use context to understand the meaning of words
- use a card catalog to find the author, title, and subject cards
- use an index to locate information (e.g., in newspapers and reference materials)
- use guide words to locate specific information in a dictionary or encyclopedia
- select words or phrases from a passage that indicate under what topic information in other materials may be found
- use maps, charts, graphs, and schedules to get information
- follow a set of written directions
- survey the chapter titles, pictures, and summary paragraphs of a book to determine the general content of that book

Reading for the Gifted and Creative Student

There has been much emphasis in the instructional program on reading for the disabled readers. Few schools have considered the needs of gifted or creative students and provided programs for them, but gifted students will not be able to develop skills commensurate with their intellectual endowments through personal initiative alone. A balanced reading program in the secondary school will provide for the needs of the student.

> Helping these students to achieve appropriate growth requires that the teacher knows how to identify the gifted, knows their characteristics as learners, and knows how to make educational adjustments to meet their needs. (8:104)

Identification

The matter of identifying gifted students involves the identification of the intellectually gifted student on the one hand and of the creative student on the other hand. In the case of the intellectually gifted, fairly objective means may be employed in the process of identification. However, somewhat subjective means may be brought to bear on the task of identifying students who are creative. The need is to identify all students who consistently demonstrate exceptional ability regardless of the specific nature of their talents.

Both intelligence and creativity are intangible human traits which at best can be determined only in an indirect manner. In the case of intelligence, any measure that is used lacks perfection and the measure is essentially relative in nature. That is to say that a student's performance on an intelligence test is relative to the performance of other students who take the same test. In the case of creativity, performance in the student's area of talent is likewise a relative matter. For example, a student's performance in music, art, or athletics, is relative to performances of other musicians, artists, or athletes. In any case, the intellectually gifted and the creative students are both deserving of educational experience that will assure the fullest development of their unique talents.

The materials generally utilized in intelligence tests are not suitable for assessing originality, imagination, or creative responses. They may measure one kind of ability for some students, but not creativity. In his studies, Paul Torrance, noted author on creativity, found that about 70 percent of the top 20 percent on measures of creativity would have been excluded from gifted groups which were selected on the basis of intelligence only. The student with special abilities or aptitudes may or may not be superior in general academic areas such as reading. (25:5a)

Information about the students' reading status may be obtained from informal and formal assessments. Specific plans for building skills should then be worked out according to each student's interests and needs.

The quickest and best way of assessing each student's ability to comprehend and communicate what is read is to give an informal test on a selection from a book the student will be expected to read. The selection should be long enough—500 to 1,000 words—to test the ability to grasp the structure of the passage.

Questions that indicate levels of comprehension may be constructed using a combination of the following formats:

- short-answer

- multiple-choice
- objective

These questions may be designed to determine recognition of important ideas and details, ability to interpret and generalize, ability to draw inferences and conclusions, and ability to determine the meaning of key words in a given context.

Characteristics of the Gifted Student

Research in the education of the gifted student has been conducted for several decades. Perhaps the most comprehensive studies were begun in the 1920s by Lewis Terman and his associates at Stanford University on the characteristics of 1,500 gifted students. They concluded that typical students in the group had mastered the subjects to a point about two grades beyond the one in which they were enrolled and some of them three or four grades beyond. They were also found to be superior in physical and social adjustment.

Rapidity in learning also characterizes the gifted who acquire academic skills in about half the time alloted to them.

Other characteristics of gifted or creative students may be the following:

- high verbal ability
- a large vocabulary
- a wide variety of reading interests
- artistic talent in fields of music, art, or dramatics
- social leadership
- the ability to find new ways of doing things or solving problems

Methods of Teaching

Individualization of the reading instruction must be planned if the gifted and creative are to receive the type of education they need and deserve.

Considerations for planning a differentiated program should include

- continuity of reading instruction
- continuous evaluation of reading ability and achievement
- proper grouping for specific instruction
- active student participation in the instructional process
- preparation for flexibility of reading style according to the type of material and purpose

- availability of a wide range of reading material

Programs designed for superior students should include versatility in reading, opportunity for developing a superior vocabulary, skills in literary appreciation, and instruction in the use of higher mental processes associated with creative expression and critical evaluation.

> The versatile reader is one who adjusts his speed and method to the type of material at hand and to his needs, just as a motorist varies his speed according to driving conditions and his desire to cover ground quickly or to proceed leisurely. (3:297)

Provision of an abundance of materials to support wide reading in various subject matter areas is necessary for a good program in vocabulary development. Subject matter teachers can greatly enhance the program by emphasizing the acquisition and utilization of vocabulary in their subject areas.

Skills in literary appreciation may include detecting mood and tone of the selection, recognizing the author's style of writing, and noting various literary devises employed.

Reading is inseparable from thinking. Both critical and creative reading are related to critical and creative thinking. Creative thinking involves higher-ordered mental processes that include perceiving, forming concepts, abstracting principles and significant relationships, drawing conclusions, making comparisons, and making applications.

The teaching of creative reading may include creative inquiry, integration, criticism, and application.

Critical reading or critical thinking includes skills needed to make judgments, to evaluate, and to select on the basis of truthfulness, relevancy, or authenticity.

For both the gifted and the creative students it will be the quality, not the quantity, of the educational experiences that will assure full development of their unique talents, whatever they may be.

"Reading is the key to knowledge, achievement, and success."

Dionne Warwick

Reading in the Content Areas

- **Reading in English**
- **Reading in Social Studies**
- **Reading in Mathematics**
- **Reading in Science**
- **Reading in Second Languages**
- **Reading in Business Education**
- **Reading in Driver Education**
- **Reading and Physical Education**
- **Reading and the Fine Arts**
- **Reading and the Learning Resource Center**
- **Reading in Other Content Areas**

Reading in the Content Areas

In numerous school systems, basal reading instruction is the only systematic training in reading received by most students. The instructional program generally places emphasis on the reading of narrative or simple factual material, and even this instruction is often terminated at the end of the sixth grade. Beyond the elementary school level, training in how to read is usually dependent upon the individual teacher's recognition of students' needs. For that reason, there are many students entering the secondary school who have had little instruction in the reading skills needed for effective study in the content areas.

Every content area teacher should accept the responsibility of helping students deal with the problems encountered in textbook reading. While reading teachers might provide some help, the responsibility for helping students read materials in the content areas should not be delegated to a special reading teacher. Marksheffel allows few exceptions to the fact that "the subject-matter teacher is the best qualified person in the school for teaching reading in his subject, although he may deny it, or may fail to realize his potential."

> What are the secondary teacher's competencies for teaching subject matter and reading? First of all, through his interest, preparation, and education, he is an expert or specialist in his field. He has acquired a large, meaningful vocabulary necessary for intelligent communication when receiving or relating facts vital to adequate concept development. He has engaged in numerous direct and vicarious experiences basic to general and specific knowledge in his subject matter field.
>
> If the above statements about the teacher's capability are acceptable, who is most capable of helping a student learn to pronounce new words accurately, and associate meanings with new symbols? Who can best detect student strengths and weaknesses in concept development? Who is better prepared to motivate and create student interest in the subject? Who else knows the important parts of the text that require slow, deliberate, thoughtful reading and which areas need only to be read quickly for main ideas? Who has the background and understanding for helping the student obtain and read materials that provide the vicarious experiences essential to mastery of the content in this area? Who is most qualified to help students set specific, attainable goals necessary for learning the subject?
>
> There is no dodging the fact that the subject-matter teacher is unquestionably the most adept. His Achilles' heel is that he has had no experience in how to relate reading and subject matter. (18:49-50)

The Achilles' heel can be treated through personal reading and study, inservice training, workshops, and university course work.

In general, helping students read in content areas involves helping students with reading problems associated with textbook reading. The problems deal primarily with (1) general, special, and technical vocabularies, (2) all the skills of comprehension, (3) various styles of writing, (4) locational and organizational skills, (5) critical evaluation of materials read, (6) the retention and ultimate application of that which is read, and (7) diagrammatical materials.

To prevent student frustration caused by reading difficulty and to facilitate the development of content goals, Stevenson T. Hansell, contributing author to professional journals on reading in the content areas, offers seven suggestions: (1) ask students to examine the initial information, then (2) ask the key question or alternative questions. After (3) listing all guesses on the chalkboard, the teacher will (4) ask students to read to find if the author included their guess. Noncontributing students may be asked to select one or more guesses they can call their own. The teacher then (5) asks students to evaluate their guesses in relation to the passage, (6) clarify the key concepts, and (7) ask open-ended questions that encourage generalization and application. (12:309)

Some reading skills are applied more in one content area than others. For example, in the language arts, style of writing is highly important because the students are asked to deal with such writings as essays, novels, short stories, plays, fables, poetry, and biographies; whereas, in mathematics, the reading material to be dealt with is very compactly written and students often encounter special symbols and signs, numbers, abbreviations, and words in a single sentence. The style of writing may be such that rapid reading is not suitable, details turn out to be highly important, and several readings may be required to understand a particular concept or to decide on the proper sequence of the steps to be carried out in solving a problem. Content teachers should decide how they can best help students overcome "reading-learning" difficulties in the specific content areas and provide adequate emphasis on the reading study skills most frequently used. The students' success in each content area will depend on their ability to do textbook reading.

Robert C. Aukerman, author of textbooks on elementary and secondary reading instruction, lists six skills that constitute the competencies necessary for content area reading. They are:

- reading for the main ideas
- knowledge of advanced and specialized vocabulary
- utilization of contextural clues to meaning
- proficiency in structural analysis
- ability to adjust reading rate and technique to purpose
- skill in analytical and critical reading (3:63)

Following are suggestions for teaching reading in selected content areas. In some instances, the suggestions may overlap with the seven problems associated with textbook reading cited on page 41. Keep in mind the seven reading problems associated with textbook reading are common to virtually all content areas, but the emphasis may vary from one content area to another.

Reading in English

Reading skill development is outlined in the *English Language Arts Curriculum Framework K-12,* Texas Education Agency Publication CU0 838 01, as a regular part of the English program. The English courses, English I, English II, English III, English IV, and Correlated Language Arts, offer ample opportunity for the development of reading skills along the district's continuum for reading development. Students who are progressing in a normal manner should be able to continue with the reading instruction outlined in the English courses. Special reading courses, Basic Reading Skills, Reading Improvement, and Developmental Reading, are elective courses that satisfy specific needs for identified students.

The reading skills included in the English courses are described in the following paragraphs.

Upon completion of the course, English I, a student should be able to:

- select the main idea of an expository paragraph
- indicate the main divisions of an essay
- interpret ideas implied but not directly stated
- recognize relevant details
- determine the purpose of an illustration or example
- distinguish between factual and suppositional examples
- recognize the author's point of view particularly in content materials
- draw conclusions and make inferences
- predict outcomes and future actions
- vary rate according to purpose and difficulty of materials
- skim for answers directly stated, for previewing, for reviewing, and for browsing
- determine word meanings by context clues
- use advanced dictionaries for determining word meanings by context clues
- read and follow directions involving substeps
- interpret diagrams, graphs, and statistical illustrations with increasing skill
- use the format and organization of a book in understanding logical development of topics and chronological presentations
- reflect meaning, mood, and tone in oral reading by utilizing interpretation skills such as phrasing, cadence, and stress

Upon completion of the course, English II, a student should be able to:

- understand word meaning by using selected sections of advanced and special dictionaries
- determine pronunciations and select meaning in dictionaries
- use dictionaries as descriptive rather than prescriptive references
- use reference materials: atlas, encyclopedia, almanac, and bibliographies
- read complex maps, charts, tables

- select the main idea of a paragraph and recognize relevant details
- differentiate between fact and opinion
- draw conclusions and make inferences
- recognize the author's purpose, tone, mood, and intent
- evaluate and make judgments on the basis of information given
- perceive cause-and-effect relationships
- recognize various persuasion devices
- adjust reading procedures and rate according to purpose
- arrange a list of events in sequential order

Upon completion of the course, English III, a student should be able to:

- use knowledge of contextual clues and expectancy clues in word recognition
- use special sections of advanced dictionaries in determining pronunciations and meanings
- understand the organization in long essays and how paragraphing is related to complexity of idea
- express the main idea of a paragraph in one sentence
- interpret, appraise, and conclude by differentiating between fact and opinion, grounded and ungrounded belief, rational thought and rationalization
- recognize the difference between deductive and inductive reasoning
- determine the purpose of an illustration or example
- evaluate the author's point of view in terms of that view and purpose
- identify the purpose in reading a specific selection and adjust reading procedures, techniques, and rate according to the purpose
- develop a system for study-reading
- follow complex directions involving subordinate steps
- use various specialized reference materials independently
- read complex maps, charts, and tables
- use prefaces, footnotes, cross references, and appendixes

Upon completion of the course, English IV, a student should be able to:

- use advanced and special dictionaries
- determine meanings of frequently used abstract words through the author's context
- use dictionaries as descriptive rather than prescriptive references
- differentiate memorization or verbalization from concept understanding
- identify the sentence of a paragraph that expresses the main idea and sense the interrelationships that exist between and among the sentences in the paragraphs that provide details supporting or explaining the main idea
- determine with independence the author's point of view or purpose and evaluate the qualifications of the author
- evaluate the integrity of the publisher and the effects of the publication date on the accuracy of content
- recognize whether the author is using inductive or deductive reasoning
- recognize the use of irrelevant data, false analogies, over-generalizations, half-truths, emotional and informational language, sarcasm, and quotations out of context for the purpose of distorting ideas
- recognize the devices of propoganda, such as name calling, testimonials, glittering generalities, transfer, card stacking, and the bandwagon technique
- adjust reading rate according to purpose and type of reading material
- skim to get the general idea or gist of the material when previewing for study
- scan to locate specific information
- use reference materials, periodic indexes, and various special materials such as graphs, charts, maps and globes, pictures and diagrams, scale drawings, and statistical illustrations
- predict probable future outcomes
- understand character roles and analyze subtle emotional reactions and motives of characters
- sense subtle humor and pathos
- elaborate on ideas presented and suggest other solutions
- arrive at a generalization from a given series of details and/or assumptions
- test hypotheses

Correlated Language Arts is a course designed as an alternative to the regular English courses. Students assigned to this course are normally deficient in the reading skills necessary to continue successfully in their academic courses or to be successful in occupational pursuits. Reading skills, therefore, need to be emphasized as separate objectives and directly taught, but they should be practiced extensively in a context with the other language arts.

Upon completion of this course, Correlated Language Arts, students should be able to:

- identify the main idea
- recall specific facts and details
- arrange a list of events in sequence
- perceive cause-and-effect relationships
- differentiate between figurative and literal language
- evaluate and make judgments on the basis of information given
- distinguish between fact and nonfact
- recognize various persuasion devices
- make inferences and draw logical conclusions
- arrive at a generalization from a given series of details and/or assumptions
- choose the appropriate meaning of multimeaning words
- follow written directions involving subordinate steps
- use the various parts of a book and various kinds of books as aids in locating information
- use graphic sources to get information, e.g., tables, lists, graphs, charts, maps, globes, pictures, diagrams, scale drawings, and transportation schedules
- understand commonly used terms and abbreviations found in such items as the classified section of newspapers, applications forms, payroll deduction statements
- respond with understanding to printed materials normally associated with government and law, e.g., traffic citation, voter ballot, jury summons, subpoena
- choose items for purchase on the basis of such written information as labels and newspaper and catalog descriptions
- recognize and understand the vocabularies associated with a variety of occupations, special interests, and hobbies

Reading in Social Studies

"The social studies teacher can be instrumental in improving student reading ability by providing guidance and experiences designed to develop and improve those skills which are most significant to success in reading social studies materials," *Learning Partners: Reading and Social Studies* (TEA Publication GU7 832 08, p. 16).

The teacher may through the social studies content:

- Provide knowledge of and practice in using the different parts of a book
- Help students acquire skill in locating, evaluating, and using information
- Help students learn to deal with lengthy complex sentences
- Help students to detect, understand, and retain main ideas and relevant details
- Help students acquire an understanding of concepts of time and space, the chronology of eras and events, the relationships between past and present, and cause-effect relationships
- Enhance the understanding and retention of ideas and concepts encountered when reading social studies materials by setting definite purposes for reading; for example, reading to answer a question, to find a specific detail, to evaluate a particular statement, or to determine the general significance of an article
- When possible, help students learn to use ideas and information to deal with significant personal and social problems
- Help students apply the higher-level critical reading skills when reading social studies materials
- Help students gain knowledge and skill in the use of charts, tables, graphs, maps, globes, and other pictorial or graphic presentations for aid in acquiring an understanding of social studies concepts
- Help students learn to discriminate between fact and opinion and to choose valid conclusions and make sound inferences and generalizations

For more information, see TEA Publication CU7 832 08, *Learning Partners: Reading and Social Studies.*

Reading in Mathematics

"The mathematics teacher must accept the responsibility for teaching students to read mathematics, since effective reading in mathematics is closely associated with the development of mathematics skills and concepts," *Learning Partners: Reading and Mathematics* (TEA Publication GE0 839 01, p. 1). Teachers may inventory technical terms used in the course and provide clear, workable definitions for those terms utilized in the textbook or instruction. Specialized terms are those words that have a commonly known denoted meaning but have very different and highly specific definitions when used in context of mathematics. (21:17)

Directionality has unique characteristics in reading mathematics. "Because of the nature of our place value system, one skims a number in a back-and-forth motion to read it." (17:13)

Comprehension skills that may be emphasized by the mathematics instruction are: understanding main ideas and important details, following directions, interpreting graph materials, reading mathematical sentences, and reading and solving word problems.

Reading in mathematics also requires other diverse skills such as:

- classification
- explanation of a technical process
- instructions for an experiment
- detailed statement of facts
- descriptive problem solving
- abbreviations and equations
- mathematical problems and various combinations of these. Such patterns point up the diverse task a student must be prepared to handle. (8:307)

For more information, see TEA Publication GE0 839 01, *Learning Partners: Reading and Mathematics.*

Reading in Science

Reading in science requires the ability to follow a sequence of events. It requires an orderly, systematic approach, including the ability to classify, categorize, and memorize. In science, statements are usually concise (laws, definitions, formulas) and students are required to deal with equations, formulas, scales, cross-section and longitudinal models, and flow charts. (8:310). Concept density necessitates slow and reflective reading. This reading requires opposite approaches to narrative and speeded reading.

The teacher can aid in the reading of science textbooks by these activities:

- Encourage careful, thoughtful reading of scientific materials. Re-reading may be necessary. Rate of reading should be appropriate for doing exacting, analytical reading.
- Help students read to follow directions, as when conducting a science experiment which involves a series of steps.
- Help students learn the technical and special vocabularies of science.
- Help students learn to read to derive meaning from and to use equations, formulas, charts, schematic diagrams, abbreviations, and symbols used in science.
- Help students use the main ideas and details of science materials to derive generalizations and principles.

- Help students learn to translate words into scientific symbols, formulas, and equations.
- Help students learn approaches to solving problems in science reading situations.

For more information, see TEA Publications GE8 841 01, *Learning Partners: Reading and Science,* and CU1 832 20, *Strategies for Improving Reading Skills in Science.*

Reading in Second Languages

Almost all students entering a second language class have already developed reading skills in their own language. Helping the student transfer those skills to the second language becomes the language teacher's task. Many low-level skills, the pre-reading skills of auditory perception and visual discrimination, for example, transfer automatically. Certain higher-level skills like word recognition, vocabularly building, and reading with comprehension should be reintroduced and developed in the context of the second language. This approach reinforces and strengthens those same skills in the first language as well.

The traditional four-skills language sequence* includes a necessarily limited development of reading as one of its goals. Other language courses, e.g., Latin, have the teaching of reading as their primary goal. Courses of this type concentrate on the development of reading in the second language and devote a considerable amount of time to intensive and extensive reading. Intensive reading allows the student to gain a thorough knowledge of brief passages, especially structural features. Extensive reading provides the student with longer selections for the purpose of understanding the general meaning of the text. In addition, the longer passages are read for the cultural information and insights they provide. For more information, see TEA Publications GE7 836 01, *Learning Partners: Second Languages and Reading;* CU1 832 09, *Second Language Education in Texas;* and *Texas State Plan for Bilingual Education, Appendix D: Curriculum Framework for English Language Development 6-12.*

Reading in Business Education

"Many students' business education skills would improve markedly if their reading skills were upgraded. Every business education teacher should accept the responsibility of helping students deal with the problems encountered in reading, especially textbook reading," *Learning Partners: Business Education and Reading* (TEA Publication BR6 832 02, p. 1).

Subjects that are usually included in business education are accounting, clerical bookkeeping, bookkeeping, business English, business mathematics, commercial law, sales, stenography, and typing. In order to be successful in these areas students need to be able to

- recognize symbols quickly
- read in phrases quickly
- think rapidly
- follow directions accurately

*Listening, speaking, reading, and writing.

- understand technical terms
- comprehend material which is common in business subjects
- read graphs, charts, and diagrams
- skim

(26:22)

In all courses in business education, the teaching of the specialized and technical vocabulary is essential for understanding. Equally important is the teaching of the comprehension skills necessary for understanding the concept development. Study skills, locational skills, and graphic aids should be taught at the appropriate point in the instructional program. For more specific information see TEA Publication BR6 832 02, *Learning Partners: Business Education and Reading.*

Reading in Driver Education

Students must possess a number of reading skills to pass the written test required in Texas for obtaining a driver's license. The main reading skills required and, therefore, to be taught are how to:

- follow directions
- perceive shapes of road signs quickly
- read road signs
- read and remember rules for good driving
- concentrate
- think fast and use good judgment
- read a driver's manual
- read a traffic ticket
- read directions on licensing procedures
- read rules and regulations about motor vehicle inspection
- read regulations for renewing license plates

A technical vocabulary might include the following terms:

- pedestrian

- ignition
- survey
- dangerous
- judgment
- monoxide
- ventilation
- monotony
- apparatus
- seatbelt
- driving while intoxicated

Instruction in comprehension should include determining word and phrase meaning; reading diagrams; comprehending the main idea, facts and details, sequence, and generalizations, drawing conclusions; following directions; comprehending printed symbols and processing information. Instruction and careful assessment of visual perception and synthesis should be a part of the reading skills development.

Reading and Physical Education

Although teachers of physical education classes do not usually use textbooks, there are several reading and study skills essential to success in these classes. Students should be able to follow oral directions and signals, distinguish between left and right, remember details in sequence, read charts and diagrams of plays in games, and learn technical vocabulary.

The physical education curriculum frequently requires:

- reading to understand the history of a sport or game
- reading to understand scoring procedures for various sports and games
- reading to follow rules and regulations of play
- reading sports articles in newspapers and magazines
- reading to understand official signals during play

For further information, see the TEA brochure *Learning Partners: Physical Education and Reading.*

Reading and the Fine Arts

The reading and understanding of music requires an extraordinary high level of reading competence. As in other subject areas, the terms and the vocabulary are unique to music. Learning music is similar to learning another language. The reading of symbols at a rapid rate is also a requirement of a successful music reader. Specific reading skills demanded of the student are to:

- read words of songs
- learn meanings of musical terms and symbols
- read notation of musical selections quickly and accurately
- read about the elements of music, music history, composers, and other musical works
- follow directions in music textbooks

For more information, see the TEA brochure *Learning Partners: Music and Reading.*

The reading skills needed for successful experiences in art classes may be as varied as the activities in which students are engaged, the materials and techniques required, and the methodology used by the teacher in teaching the course. Perception and visual acuity are skills usually tested by reading specialists and are essential to students' appreciation of the course. Basic skills usually developed in art education include how to:

- read and understand technical terms
- observe carefully to appreciate design, composition, elements, principles, etc.
- follow oral and written directions
- take notes
- conduct research
- read about lives of artists
- read and comprehend art criticism
- read and comprehend the history of art
(26:20)

For more information, see the TEA Publication *Learning Partners: Art and Reading.*

Creative dramatics can aid in motivating students to read and organize their interpretations of literature into stimulating responses. The processes required of the student are concentration, analysis, evaluation, inference, and creativity. Following oral and written directions, understanding main ideas, ordering

details in sequence, interpreting implied meanings, drawing conclusions, and making generalizations from assumptions are some of the essential reading skills that may be emphasized in creative dramatics classes.

For further information see TEA Publication CU9 835 01, *Learning Partners: Reading and Creative Dramatics.*

Reading and the Learning Resource Center

"The learning resource center serves as a laboratory to extend instruction and to provide opportunities for independent practice of skills," *Learning Partners: Reading and the Learning Resource Center* (TEA Publication GE9 892 03). Some skills that can be taught, retaught, reinforced by the resource teacher are:

- location of specific materials
- use of media and other resources
- selection of appropriate study and practice materials in all media
- developing reading maturity
- listening patterns and attitudes
- critical and evaluative reading skills
- library skills, i.e., use of atlas and encyclopedias
- use of parts of books, i.e, table of contents, title page, index, glossary
- use of graphic materials, i.e., globes, maps, charts, schedules

For further information, see TEA Publication GE9 892 02, *Learning Partners: Reading and the Learning Resource Center.*

Reading and Other Content Areas

Reading in other areas of study such as industrial arts, home economics, auto mechanics, health, and electronics is not easy. Direct teaching of how to read in those areas will be required to help students read effectively and efficiently. Each area of study has a special and technical vocabulary that students must learn if they are to read in that area with understanding. Careful reading, and at times re-reading, is necessary for such materials as recipes, patterns, drawings, blueprints, invoices, charts, graphs, and special symbols.

Teaching reading in these areas involves helping students with the reading problems associated with textbook reading mentioned on page 41. In addition, many of the suggestions for teaching reading in English, social studies, science, and mathematics are suitable for teachers of other content areas. Teachers should select from the suggestions those that would be most appropriate and those that, if properly emphasized, would help students read and learn more efficiently in each area.

"In my opinion, the ability to read rapidly and well is one of the greatest assets anyone can acquire. Not only does a love of reading open unlimited worlds of adventure, but it unlocks the doors to business success."

Gerald R. Ford

Appendixes

APPENDIX A

Texas Assessment of Basic Skills
Reading
Objective Specifications
Exit Level

Reading Selections

The readability of the reading selections and items should not exceed eighth grade exit level reading.

Objective

Identify the main idea.

Skill
After reading a passage, the student will determine the main idea.

Content Domain (Limits)
1. Selections shall be both narrative and nonnarrative in nature.

2. The main idea shall be stated or implied.

Objective

Arrange a list of events in sequence.

Skill
After reading a selection, the student will determine the sequence of events.

Content Domain (Limits)
All selections must include sequential events.

Objective

Perceive cause-and-effect relationships.

Skill
After reading a selection, the student will identify correctly a cause-and-effect relationship.

Content Domain (Limits)
All selections shall deal with cause-and-effect.

Objective

Evaluate and make judgments on the basis of information given.

Skill
After reading a selection, the student will make an evaluation or judgment based on the information given.

Content Domain (Limits)
All selections shall be of the type from which evaluations and judgments may be made.

Objective

Distinguish between fact and nonfact.

Skill
Given a selection that contains factual and nonfactual sentences or phrases, the student will distinguish between the two.

Content Domain (Limits)
All items shall be tied to reading passages.

Objective

Make inferences and draw logical conclusions.

Skill
Given a reading selection, the student will identify the correct inference, conclusion, or analogy.

Content Domain (Limits)
In all items, the conclusion must be an implied one.

Objective

Arrive at a generalization from a given series of details and/or assumptions.

Skill
After reading a selection that contains a series of details and/or assumptions, the student will identify the correct generalization.

Content Domain (Limits)
All selections must contain a series of details and/or assumptions.

Objective

Follow written directions involving subordinate steps.

Skill
Given a set of written directions, the student will identify the results produced by following those directions.

Content Domain (Limits)
Items will be based on figures, narrative, or a combination of both.

Objective

Use the various parts of a book as aids in locating information (e.g., title page, table of contents, preface, and index).

Skill
Given a part of a book, the student will demonstrate knowledge of the uses of various parts of a book.

Content Domain (Limits)
Parts of books that may be included are: title page, table of contents, preface, index.

Objective

Use various sources as aids in locating information (e.g., dictionary, telephone book, encyclopedia, newspaper).

Skill
Given various sources of information and a specific topic, the student will demonstrate knowledge of the uses of those sources of information.

Content Domain (Limits)
Sources of information that may be included are: dictionary, telephone book, encyclopedia, newspaper.

Objective

Use graphic sources to get information (e.g., tables, lists, charts, graphs, maps, globes, pictures, diagrams, scale drawings, transportation schedules).

Skill
The student shall use graphic sources to obtain specific information.

Content Domain (Limits)
1. Graphic sources may include: tables, lists, charts, graphs, maps, globes, pictures, diagrams, scale drawings, transportation schedules.

2. Information may be stated directly or inferred from the graphic source.

APPENDIX B
Bibliography

1. Altick, Richard. *Preface to Critical Reading.* New York: Holt, Rinehart and Winston, 1969.

2. Artley, A. Sterl. "Research Clues." *Today's Education*, Vol. LIX (January 1970), p. 14.

3. Aukerman, Robert C. *Reading in the Secondary School Classroom.* New York: McGraw-Hill Book Company, 1972.

4. Barbe, Walter B. and Renzulli, Joseph S. *Psychology and Education of the Gifted.* New York: Irvington Publishers, Inc., 1975.

5. Berger, Allen and Hartig, Hugo. *The Reading Materials Handbook: A Guide to Materials and Sources for the Improvement of Reading at the Secondary, College, and Adult Levels.* Oshkosh, Wis.: Academic Press, 1969.

6. Bliesmer, Emery P. "Evaluating Progress in Remedial Reading Programs." *The Reading Teacher,* Vol. XV, (March 1962), p. 344.

7. Bond, Guy L.; Tinker, Miles; and Wasson, Barbara. *Reading Difficulties.* Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1979.

8. Dechant, Emerald. *Reading Improvement in the Secondary School.* Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1973.

9. Farr, Roger. *Reading: What Can Be Measured?* Newark, Del.: International Reading Association, 1970.

10. Fay, Leo. *Reading in the Content Fields: An Annotated Bibliography.* Newark, Del.: International Reading Association, 1975.

11. Gentile, Lance M. *Using Sports and Physical Education to Strengthen Reading Skills.* Newark, Del.: International Reading Association, 1980.

12. Hansell, T. Stevenson. "Increasing Understanding in Content Reading." *Journal of Reading,* Vol. 19, No. 4, January 1976, p. 307-310.

13. Harnadeck, Anita E. *Critical Reading Improvement: A Program for Self-Instruction.* New York: McGraw-Hill Book Company, 1975.

14. Karlin, Robert. *Teaching Reading in the High School.* New York: The Bobbs-Merrill Company, Inc., 1972.

15. Kavale, Kenneth. "Selecting and Evaluating Reading Tests." *Reading Tests and Teachers.* Newark, Del.: International Reading Association, 1979.

16. Labuda, Michael. *Creative Reading for Gifted Learners: A Design for Excellence.* Newark, Del.: International Reading Association, 1974.

17. *Learning Partners: Reading and Mathematics,* Austin, Texas: Texas Education Agency, 1979.

18. Marksheffel, Ned D. *Better Reading in the Secondary School.* New York: The Ronald Press Company, 1966.

19. Robinson, Francis P. *Effective Study.* New York: Harper and Row, Inc., 1970.

20. Roe, Betty D. *Reading Instruction in the Secondary School.* Chicago: Rand McNally and Company, 1978.

21. Simmons, John S. "Word Study Skills," *Developing Study Skills in Secondary Schools: Perspectives in Reading No. 4.* Newark, Del.: International Reading Association, 1970.

22. Strang, Ruth M. *Reading Diagnosis and Remediation.* Newark, Del.: International Reading Association, 1968.

23. Terman, Lewis M. and Oden, Melita H. *The Gifted Child Grows Up.* Stanford, Calif.: Stanford University Press, 1947.

24. Thomas, Ellen Lamar and Robinson, H. Alan. *Improving Reading in Energy Classroom.* Boston: Allyn and Bacon, Inc., 1974.

25. Torrance, E.P. *Guiding Creative Talent.* Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1970.

26. Viox, Ruth G. *Evaluating Reading and Study Skills in the Secondary Classroom.* Newark, Del.: International Reading Association, 1968.

27. Wilson, Robert M. *Diagnostic and Remedial Reading for Classroom and Clinic.* Ohio: Charles E. Merrill Publishing Co., 1977.

28. Witty, Paul A. *Reading for the Gifted and Creative Students.* Newark, Del.: International Reading Association, 1971.

Book Selection Aids

National Association of Independent Schools. Library Committee. *Books for Secondary School Libraries.* 5th ed. New York: R.R. Bowker, 1976. 526 pp. $15.95.

Recommended for use by college-bound high school students. Updated and expanded to reflect the changing issues and problems of the 1970s and upward. Lists 6,291 nonfiction titles, 1,000 new to this edition on such current concerns as ecology, women, race relations, etc. Arranged by Dewey Decimal classification with LC cataloging information. Contains an author, title, subject index.

H.W. Wilson Company. *Standard Catalog Series.* Bronx, N.Y.: Wilson.

Volumes revised periodically and service kept current with annual paperback supplements. Provides, in Part I, bibliographic information for each book and suggests grade levels and subject heading; in Part 2, an author-title-subject and analytical index; in Part 3, a directory of publishers and distributors. Selection of titles, made by advisory committees and consultants.

Junior High School Library Catalog. 3rd ed. 1975. 991 pp. $42, U.S.; $48, foreign. Includes four annual supplements, 1976-1979 (paper).

Includes 3,791 titles and 10,673 analytical entries with approximately 6,000 titles to be covered in the supplements. Expanded in such areas as women's rights, communal living, alcoholism, venereal diseases, and other areas of contemporary interest to meet changing curriculum and interest of junior high school children.

Senior High School Library Catalog. 11th ed. 1977. 1,416 pp. $50, U.S. and Canada; $58, foreign. Includes four annual supplements, 1978-1981 (paper).

Includes 5,281 titles, including adult titles considered appropriate for advanced high school curricula. Greater representation of books about ethnic groups. Part II provides 17,587 analytical entries. Revised every four years.

California Library Association. *13th Annual Booklist.* Sacramento, California: The Association, 1978. 47 pp. $3.50 plus 6% sales tax for Calif. orders.

Contains materials of interest to young adults in Grades 8-12 and is divided into four categories: (1) outstanding selections; (2) additional titles; (3) special interest material; and (4) school assignment material. Includes price, publisher information, and one-sentence annotations of fiction and nonfiction titles. Developed by the Young Adult Reviewers of Southern California.

National Council of Teachers of English. *Books for You: A Booklist for Senior High Students.* Urbana, Ill.: The Council, 1976. 428 pp. $2.95 ($2.25 to NCTE members).

Edited by Kenneth Donelson and members of the NCTE Committee on the Senior High School Booklist. Features annotations of more than 2,500 titles published since 1975. Divided into 50 categories of recent books that appeal to students.

Spirt, Diana L. *Introducing More Books: A Guide for the Middle Grades.* New York: R.R. Bowker, 1978. 240 pp. $13.95.

Designed to motivate reading among students in Grades 3-9. Titles are organized around "life goal" themes stressed in the middle grade curriculum. Includes related films, filmstrips, and recordings.

Weber, J. Sherwood. *Good Reading: A Guide for Serious Readers,* 4th ed. New York: R.R. Bowker, 1978. 313 pp. $12.95.

Lists, annotates, evaluates, and provides full bibliographic information on 2,500 carefully selected books. Titles arranged by subject areas cover pratically every area of human endeavor. The best in the world of reading has been prepared with the help of outstanding teachers and curriculum specialists. Includes author, title and subject indexes, and "100 significant books" section.

Withrow, Dorothy E., Helen B. Carey, and Bertha M. Hirzel. *Gateways to Readable Books.* 5th ed. Bronx, N.Y.: H.W. Wilson, 1975. 299 pp. $12, U.S. and Canada; $14, foreign.

Annotated, graded list of books in many fields for adolescents who find reading difficult. Includes more than 1,000 titles, the majority in fifth and sixth grade levels of difficulty. Titles arranged by broad subject headings with estimated grade level indicated. Author indexes, title indexes, and grade level included.

American Library Association. *Book Bait: Detailed Notes on Adult Books Popular With Young People,* compiled by Elinor Walker. 3rd ed. Chicago, Ill.: The Association, 1979. 164 pp. $4. Paper.

Comments on 100 fiction and nonfiction books chosen for their appeal to average and good high-school-age readers. Includes special points for book talks and audience interest. Only 20 books retained from former edition. Title index suggests other titles of related interest. Subject index has been added.

American Association for the Advancement of Science. *AAAS Science Book List Supplement, 1978,* compiled by Kathryn Wolff and Jill Storey. Washington: The Association, 1978. 45 pp. $16.50.

Extends the coverage of the third edition from 1969 through 1977. Lists over 2,850 selected trade and textbooks according to the Dewey Decimal Classification. Useful for secondary school and college students, teachers, and general readers.

American Library Association. *High Interest/Low Reading Level Information Packet.* Chicago, Ill: The Association, 1978. n.p. $1.50 (prepaid).

Produced by the Young Adult Services Division for distribution at ALA pre-conferences. Packet contains a bibliography of materials for poor readers. Also includes information on readability formulas, a list of easy reading books for teens, and a list of publishers who produce high-low materials.

Egleston, Roberta J. *Career Planning: Building a Library Collection.* New York: R.R. Bowker, 1979. 304 pp. $16.95.

A valuable sourcebook for librarians interested in establishing a center for career resources. Bibliography of career planning materials includes information on all types of careers. Recommended for starting a basic collection.

Kulkin, Mary Ellen. *Her Way: Biographies of Women for Young People.* Chicago, Ill.: American Library Association, 1976. 480 pp. $25.

Includes approximately 800 women for all periods of history and from all parts of the world. The first section of the book is devoted to brief profiles of 260 women intended to assist in selection. The profiles are followed by lists of biographies for preschool through high school readers. The latter part of the book consists of an annotated list of 300 collective biographies.

National Council of Teachers of English. *High Interest-Easy Reading for Junior and Senior High School Students,* 3rd ed. Urbana, Ill.: The Council, 1979. 98 pp. $2.75.

Prepared by Marion White and the Committee to Revise High Interest-Easy Reading of the National Council of Teachers of English. Annotates more than 425 current titles on a variety of subjects of interest to the student not "hooked" on reading. Arranged in 20 broad subject categories with more nonfiction than the previous editions.

National Council of Teachers of Mathematics. *A Bibliography of Recreation Mathematics, Vol. 4,* compiled by William L. Schaaf. Reston, Va.: The Council, 1978. 178 pp. $9.

Updates materials contained in the previous three volumes by listing more than 2,600 references published since 1972. Includes sources of games, puzzles, tricks, and other subjects such as geometric recreation, magic, squares, and theory recreation. Classroom activities, games, and glossary are also provided.

National Council of Teachers of Mathematics. *The High School Mathematics Library,* compiled by William L. Schaaf. 6th ed. Reston, Va.: The Council, 1976. 80 pp. $3.40.

Briefly annotated bibliography reflects current trends and needs by the inclusion of sections on metrication, computers, data processing, the mathematically gifted, and other timely subjects. This revision has deleted approximately 100 old titles and added at least the same amount of titles of current interest. The list includes 925 titles, 24 percent of published from 1970-1975.

National Council of Teachers of Mathematics. *Mathematics Library-Elementary and Junior High School,* compiled by Margariete Montague Wheeler and Clarence Ethel Hardgrove. 4th ed. Reston, Va.:

The Council, 1978. 53 pp. $4.00.

Briefly annotates children's books on mathematics. Grade level information is provided along with a list of publishers and addresses.

National Council of Teachers of Mathematics. *Measurement in School Mathematics.* Reston, Va.: The Council, 1976. 256 pp. $11.25.

First in a series of yearbooks. Topics cover such areas as learning and teaching of measurements, K-12, measuring activities with unusual devices. A metric bibliography and an annotated list of metric teaching aids are included.

Contenta, William. *Index to Science Fiction Anthologies and Collections.* Boston, Mass.: G.K. Hall, 1978. 608 pp. $28.

Intended to be standard reference for locating stories that have appeared in science fiction, anthologies, and collections of stories. Included are 12,000 different stories by 2,500 authors and more than 2,000 book titles. Useful tool for librarians in avoiding unnecessary acquisition of titles already represented in anthologies.

Fader, Daniel. *The New Hooked On Books.* New York: Berkley, 1977. 321 pp. $8.95.

Concentrates on "How to learn and how to teach reading and writing with pleasure." It includes a reading list of 1,000 authors compiled by James Duggens and Tom Finn under such headings as careers, challenges, differences, family, and other subjects of interest to young adults.

Graves, Michael, Judith Boettcher, and Randall Ryder. *Easy Reading: Book Series and Periodicals for Less Able Readers*. Newark, Del.: International Reading Association, 1979. 54 pp. $4.50.

Selected materials for middle and upper grades for the student who reads below grade level. The materials have been reviewed and evaluated. Annotations are lengthy with reading level and interest level information provided. Bibliography arranged by series title.

Sources of Diagnostic Materials

Basic Sight Word Test. Garrard Publishing Co., 1607 North Market St., Champaign, IL 61820.

Davis Reading Test. The Psychological Corporation, New York, NY 10017.

Botel Reading Inventory. Follett Publishing Co., 1010 West Washington Blvd., Chicago, IL 60607.

Classroom Reading Inventory. Wm. C. Brown and Co., 135 South Locust St., Dubuque, IA 52003.

Durrell Analysis of Reading Difficulty, New Edition. Harcourt Brace Jovanovich, Inc., 757 Third Avenue, New York, NY 10017.

Gates-Mac Ginitie Reading Test. Houghton Mifflin Co., 2 Park St., Boston, MA 02107.

Gray Oral Reading Test. Babbs-Merrill Co., Inc., 4300 East 62nd St., Indianapolis, IN 46206.

McCullough Ward Analysis Test. Personnel Press, 191 Spring St., Lexington, MA 02173.

Stanford Diagnostic Reading Test. Harcourt Brace Jovanovich, Inc., 757 Third Avenue, New York, NY 10017.

Wisconsin Tests For Reading Skill Development. A Division of National Computer Systems, Inc., 4401 W. 76th St., Minneapolis, MN 55436.

Addresses of Professional Organizations and Publications

Association for Supervision and
Curriculum Development
1201 Sixteenth Street, N.W.
Washington, DC 20036

Education Leadership
1201 Sixteenth Street, N.W.
Washington, DC 20036

The English Journal
National Council of Teachers
of English
1111 Kenyon Road
Urbana, IL 61851

International Reading Association
800 Barksdale Road
P.O. Box 8139
Newark, DE 19711

Journal of Communication
The Annenberg School Press
3620 Walnut Street
Philadelphia, PA 19014

Journal of Reading
International Reading Association
800 Barksdale Road
P.O. Box 8139
Newark, DE 19711

Language Arts
1111 Kenyon Road
Urbana, IL 61801

National Reading Conference
Godfrey Hall
Clemson University
Clemson, SC 29631

Reading Newsreport
747 Third Avenue
New York City, NY 10017

Reading World
Shippensberg State College
Box 356
Shippensberg, PA 17257

TESOL Quarterly
202 D.C. Transit Building
Georgetown University
Washington, D.C. 20057

COMPLIANCE STATEMENT

TITLE VI, CIVIL RIGHTS ACT OF 1964; THE MODIFIED COURT ORDER, CIVIL ACTION 5281, FEDERAL DISTRICT COURT, EASTERN DISTRICT OF TEXAS, TYLER DIVISION

Reviews of local education agencies pertaining to compliance with Title VI Civil Rights Act of 1964 and with specific requirements of the Modified Court Order, Civil Action No. 5281, Federal District Court, Eastern District of Texas, Tyler Division are conducted periodically by staff representatives of the Texas Education Agency. These reviews cover at least the following policies and practices:

(1) acceptance policies on student transfers from other school districts;

(2) operation of school bus routes or runs on a non-segregated basis;

(3) nondiscrimination in extracurricular activities and the use of school facilities;

(4) nondiscriminatory practices in the hiring, assigning, promoting, paying, demoting, reassigning, or dismissing of faculty and staff members who work with children;

(5) enrollment and assignment of students without discrimination on the basis of race, color, or national origin;

(6) nondiscriminatory practices relating to the use of a student's first language; and

(7) evidence of published procedures for hearing complaints and grievances.

In addition to conducting reviews, the Texas Education Agency staff representatives check complaints of discrimination made by a citizen or citizens residing in a school district where it is alleged discriminatory practices have occurred or are occurring.

Where a violation of Title VI of the Civil Rights Act is found, the findings are reported to the Office for Civil Rights, Department of Health, Education and Welfare.

If there is a direct violation of the Court Order in Civil Action No. 5281 that cannot be cleared through negotiation, the sanctions required by the Court Order are applied.

TITLE VII, CIVIL RIGHTS ACT OF 1964; EXECUTIVE ORDERS 11246 AND 11375; TITLE IX, 1973 EDUCATION AMENDMENTS; REHABILITATION ACT OF 1973 AS AMENDED; 1974 AMENDMENTS TO THE WAGE-HOUR LAW EXPANDING THE AGE DISCRIMINATION IN EMPLOYMENT ACT OF 1967; AND VIETNAM ERA VETERANS READJUSTMENT ASSISTANCE ACT OF 1972 AS AMENDED IN 1974.

It is the policy of the Texas Education Agency to comply fully with the nondiscrimination provisions of all federal and state laws and regulations by assuring that no person shall be excluded from consideration for recruitment, selection, appointment, training, promotion, retention, or any other personnel action, or be denied any benefits or participation in any programs or activities which it operates on the grounds of race, religion, color, national origin, sex, handicap, age, or veteran status (except where age, sex, or handicap constitute a bona fide occupational qualification necessary to proper and efficient administration). The Texas Education Agency makes positive efforts to employ and advance in employment all protected groups.